THE BUILDER

A RECORD OF ARCHITECTURE AND CONSTRUCTION.

VOL. CIX.—No. 3786. AUGUST 27, 1915.

THE FRONTIERS OF ARCHITECTURE.

THE romance of history and the fortunes of nations are concerned with changes of frontiers which mark the advance and recession of the prosperity and power of races, their triumphs, and their failures. Frontiers are enchanted lands for the students of history, the localities where we may study the results of the fusion of races, and the changes produced by different systems of government and administration; they also suggest thoughts of continual watchfulness, for it is on frontier lands that the first burden of war falls, and where nation has to protect itself against nation by all the devices that mankind has taught itself during long ages of development.

The lines of national boundaries as determined by race and the lines of actual boundaries as determined by fact are seldom completely identical; when they are not we know that one nation has succeeded in taking more than its due, while its weaker neighbour has suffered in the process. And this applies not only to nations and to history, but also to classes and professions. The French aristocracy before the Revolution had more than their due in wealth and power, and when the Revolution came the old order vanished, and social position spelt punishment and death.

What are the real boundaries of architecture—which we may define as the art of building beautifully; and does the architect of to-day hold sway within the territories which we may say should be his own? Are railway-stations, bridges, and factories subjects for architecture, or are we to admit that, although they belong to the world of building, it is not possible for us to express their purpose in terms of beauty? We do not think that anyone who remembers the mediæval bridges, Waterloo Bridge, or the Pont Alexandre III. in Paris can say that bridges cannot possess beauty of a high order, nor that those who have seen some of the more recent American terminal stations, or that of the Gare de Lyon in Paris will say that a railway-station cannot be made a thing of beauty; yet, as a rule, they are eyesores, while among commercial buildings are many factories whose requirements and wants can be expressed in terms of architecture without sacrifice of practical requirements.

Clearly, therefore, all these buildings which are here often regarded as outside the architect's scope are really within the natural boundaries of architecture, and it would be well in the interests of beauty if the architect could assert his claim to be considered in connection with their design. At the root of the matter lies the fact that in all the structures we have mentioned the material which is of paramount importance is steel, and the use of steel construction involves calculation necessitating much special education, which forms an essential part of an engineer's training, but of which the average architect knows little or nothing, and because of this only it has become customary to consult the engineer to the exclusion of the architect with regard to buildings which are often of the first magnitude and always of importance. We do not consider the remedy which is usually proposed—that an architect and engineer should be consulted together in such cases—altogether meets the difficulty; for men representing two different professions, if working together in a special case, seldom know each other's standpoint sufficiently to work in complete unison. The more ideal arrangement appears to be that practised by the great architectural firms in America, the inclusion in an architect's staff of engineering assistants of high qualifications, for in this way a complete harmony in working is made possible; the advantage of which, from an architect's standpoint, is evidenced by the fact that in America architects are habitually employed to design many of the great structures which in this country would be relegated to engineers, and which also results in the erection of many beautiful buildings in the great American cities. Not the least of its advantages is the fact that the American architect acquires a better reputation as a business man than is sometimes the case here, because he is regarded as a more competent constructor.

On a smaller scale, the combination of an engineer and architect in the same firm would have many advantages, and we wish such combinations were more frequent. Most architects now have in the course of their ordinary practice to use steel construction to an extent unknown until recent years; and, unless they have unusual knowledge of steel construction, they either have to employ engineers themselves to do a portion of their work, or, what is a less satisfactory method, place themselves more or less in the hands of manufacturing firms, who, however honest they may be, can hardly be expected to have the same direct interest in economy that the architect has. Broadly speaking, we believe much of the debatable land might be recovered by architects if they would acquire the requisite knowledge of a branch of engineering or else work in conjunction with engineers.

Another part of the architect's frontier territory is that described by the word "decoration," which is all-embracing, and, like charity, often covers a multitude of sins. It may mean anything from the selection of wall-papers to the design of mural paintings and gorgeous and complicated metal-work. The great decorative firms try to persuade the public that an architect's function is ended when he has designed the shell of a structure, and that the decorator should then be called upon to work his will unchecked; and we are afraid that some architects defend their fortress but weakly, and admit the enemy within their gates. Now, the only reason why an architect should employ the so-called "decorator" is if he is convinced that a good contractor cannot carry out a design of which he is given details, and it is the architect's part to supply those details. Both steelwork and what is called decoration are adjuncts of building, and, as all men are not equally gifted, the ideal method is a partnership which includes men of special gifts, or a staff which includes men who have special aptitude, for an architect in availing himself of a decorator's aid to design and carry out his work should remember that in the first place the cost of the work must be enhanced by the payment of some proportion of the decorator's staff expenses; and, in the second, he is enabling a class of men to prosper who use their endeavours naturally enough to secure work directly which should go to an architect; he is, to use a metaphor, helping to fix a boundary in the enemy's favour and not that of his own profession.

The case of the individual craftsmen or guild of craftsmen is quite on another footing. No one with discretion would, if he had the opportunity of employing a Benvenuto Cellini or a Grinling Gibbons on his building, try to fetter or minutely direct such an artist; but, on the other hand, he should have sufficient knowledge of decoration to be able to design a room or building in some one style without calling in the aid of a decorator or using his drawings. His knowledge and skill should in every case be sufficient to enable him absolutely to direct every part of the work in what he conceives to be the best manner and one most conducive to his client's requirements. Architects cannot in effect prevent the general public from employing the speculative builder or the advertising decorator, but they can, by making themselves competent in their own work by education and study, show the public that a different quality and feeling mark their work from that of others, which the public will in time think is cheaply purchased at the cost of employing them. In this way, and this way alone, can architects as a whole reach the frontiers which should be their own, and expel the alien enemy, for it lies with them to prove by example that an architect's work is to construct soundly and design with beauty, with the recognition of which fact their difficulties will be at an end.

NOTES.

Building and Economy.

MR. ERNEST NEWTON has written an admirable letter to the *Times* under this heading, in which he points out the defects of the recommendation of the Parliamentary War Committee that "no one should build a house for himself at the present time" and that "decorations and enlargements should be cut down as much as possible." It is pointed out that a large number of people above military age, and having no aptitude for munition-making, will be deprived of employment and must be supported should the Committee's recommendations be acted on, and that from a point of view of economy what is gained in one direction will be lost in another. If, as Mr. Newton says, such restriction of employment is really necessary, its results will be faced with fortitude, but he urges that before a recommendation which will have the force of a command is made officially we should have the assurance that the Committee have had the assistance of those who are conversant with the matter in all its ramifications and that all points have been carefully considered. We have pointed out in several of our articles the error of the view that building is a luxury, and the apparent disregard of many to remember that it means, for the most part, the expenditure of money within the country on materials and labour produced here, and that consequently the whole community cannot be impoverished by it. We have as yet had no clear statement made with authority as to the number of men who are wanted to give their services either in the Army or in munition-making. Until this is done the whole community is left in a state of doubt and hesitation which is detrimental to industry as a whole. Obviously in this crisis of our national history if a man's industry is wanted by the State directly the State has the paramount claim. If not, he is doing his duty by the State in devoting his energies to the occupation he is best suited for.

A British Palace of Industry.

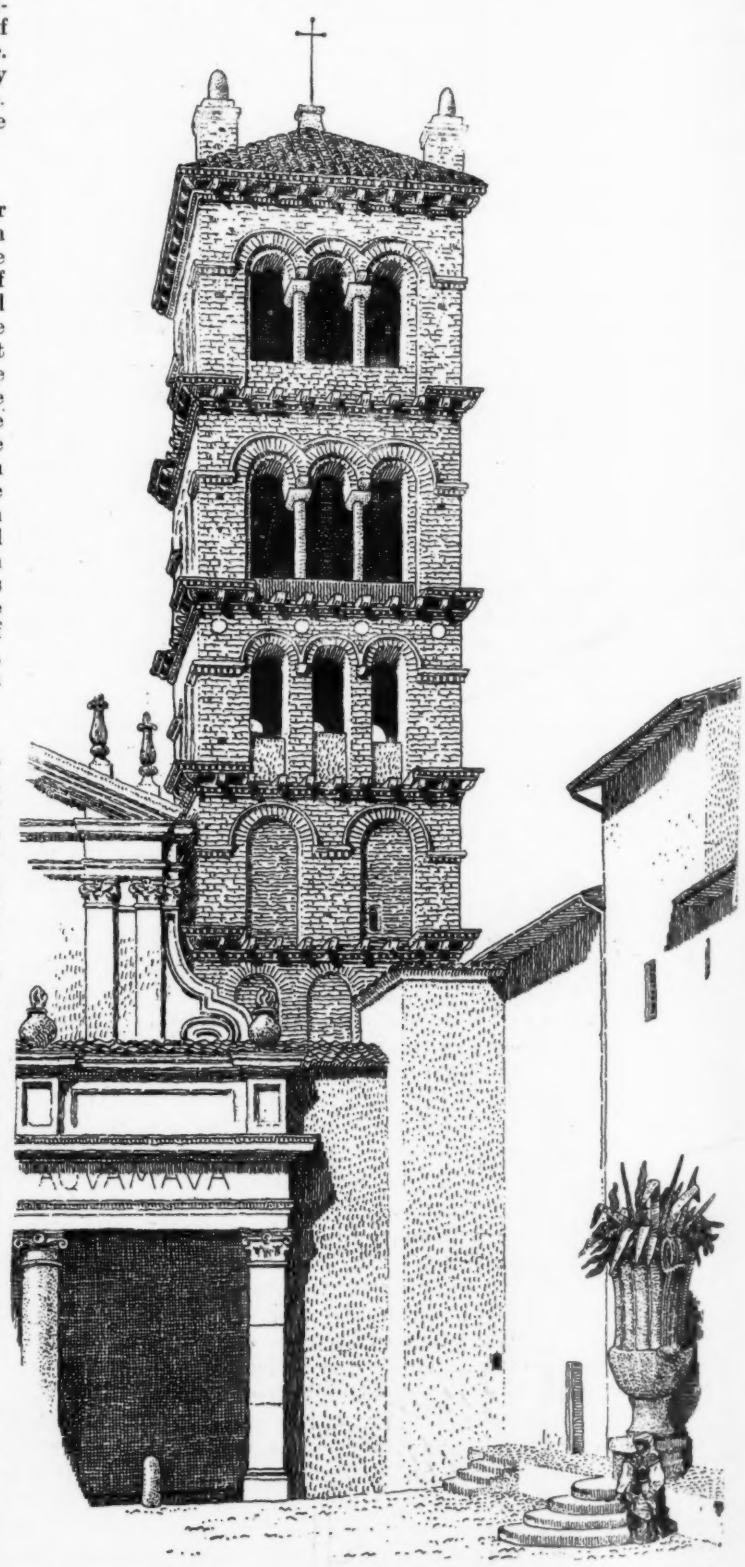
IN the spring of 1917 a Palace of Industry, after the fashion of the Leipzig Fair, is to be opened in London. There will be two fairs a year, in the spring and autumn, in which the main industries of the Empire are to be exhibited. The Palace will be managed by an advisory council representing the various trade associations of the United Kingdom. The selected site will be at Willesden Green, where forty-five acres have been taken, and the proposed buildings will be three times the size of Olympia. Pleasure grounds will be attached, but the exhibitions will not be of the popular kind we are accustomed to in London. Only wholesale manufacturers will be allowed to show their goods, and admission will be limited to traders and possible customers by ticket. The procedure, in fact, will be exactly that of the Leipzig Fair, which has proved so valuable from the German traders' standpoint. It will last for three weeks, and will be largely advertised in the British Dominions and foreign countries. In the Summer Exhibition it is proposed to illustrate the scenery and natural advantages of the Empire. We hope this departure is to be taken as an indication of further enterprise on the part of the commercial classes of this country, who have been wanting in energy in the past, though they have been the sufferers by official neglect in addition.

Moscow.

IT has been stated that when the present Tsar came to the throne his advisers discussed the advantages of reinstating Moscow as the capital of the Russian Empire, and it is hinted that this may possibly come about in the near future. The advantages of the "little window looking out on Europe" will be somewhat discounted when Constantinople becomes a Russian city, and when the Empire has the freedom of the Bosphorus and Dardanelles. Besides, Petrograd has been symbolic of the German influences which have coloured the policy of many of Peter the Great's successors, which, we may say, is now a thing of past history. Russia has little to learn in humanity from her immediate Western neighbours, and would rather seem to have lessons to give them instead. Moreover, till wars cease the capital of a country is best situated in its centre for purposes of security, unless geographic conditions make it inexpedient. France would be better placed for defence if its capital were situated on the Loire instead of the Seine, and there are no overwhelming obstacles which would militate seriously against the transference of the Russian capital, especially to the city which represents the most pre-eminently sacred traditions of Russia and was the birthplace of her political power when the Grand Dukes of Moscow led the movement for the emancipation of Russia from Tartar rule. It would be interesting if the German project of an advance on Petrograd matured, and when it was in progress the Russian Government made at the most important of provincial cities instead of the capital of their Empire!

Holiday in War-Time.

WHILE fully sharing the general feeling that this is no time for holiday-making, we are inclined to think that, precisely because of the strain of the war, the ordinary worker more than ever needs change and rest if he is to be fit for the even more strenuous and anxious times which appear to lie ahead. This is particularly true of those whose work, even in normal times, entails nervous or mental strain. However long the war lasts, it must produce unusual strain on all of us. Whatever may be the power of endurance possessed by the routine worker whose efforts are chiefly muscular, it is extremely doubtful whether the average brain-worker can endure to the end without definite holidays. As his services should be of special value to the country at the close of the war, it is obviously necessary that he should endure, and to this end it seeem only reasonable that he should take such rest as his means will allow, and enjoy it as much as his personal anxieties will permit. But even if this course is adopted by all those in a position to do so, there remains the large number of those in difficulties caused by the war, whose financial position must add enormously to their mental strain. They are precisely those who most need rest and change, and they are precisely those who cannot get them. We do not know whether this question has already come within the scope of the numerous activities of the Professional Classes War Relief Council, but it seems to be one that is worth consideration. There must be many well-to-do people in all parts of the country who would be only too pleased to offer hospitality to men and women of their own class who were recommended by any responsible society or committee. There must also be many professional men with incomes unaffected by the war—such as those occupying official positions—who would be glad of an opportunity to show their sympathy with their less fortunate colleagues in some practical way. The Architects' War Committee is already doing its best to provide work for those in difficulties; would it be possible for it to add still further to its labours by organising holidays for those that need them most?



Sta Cecilia in Trastevere, with the Ancient Kantharos. *(See next page.)*

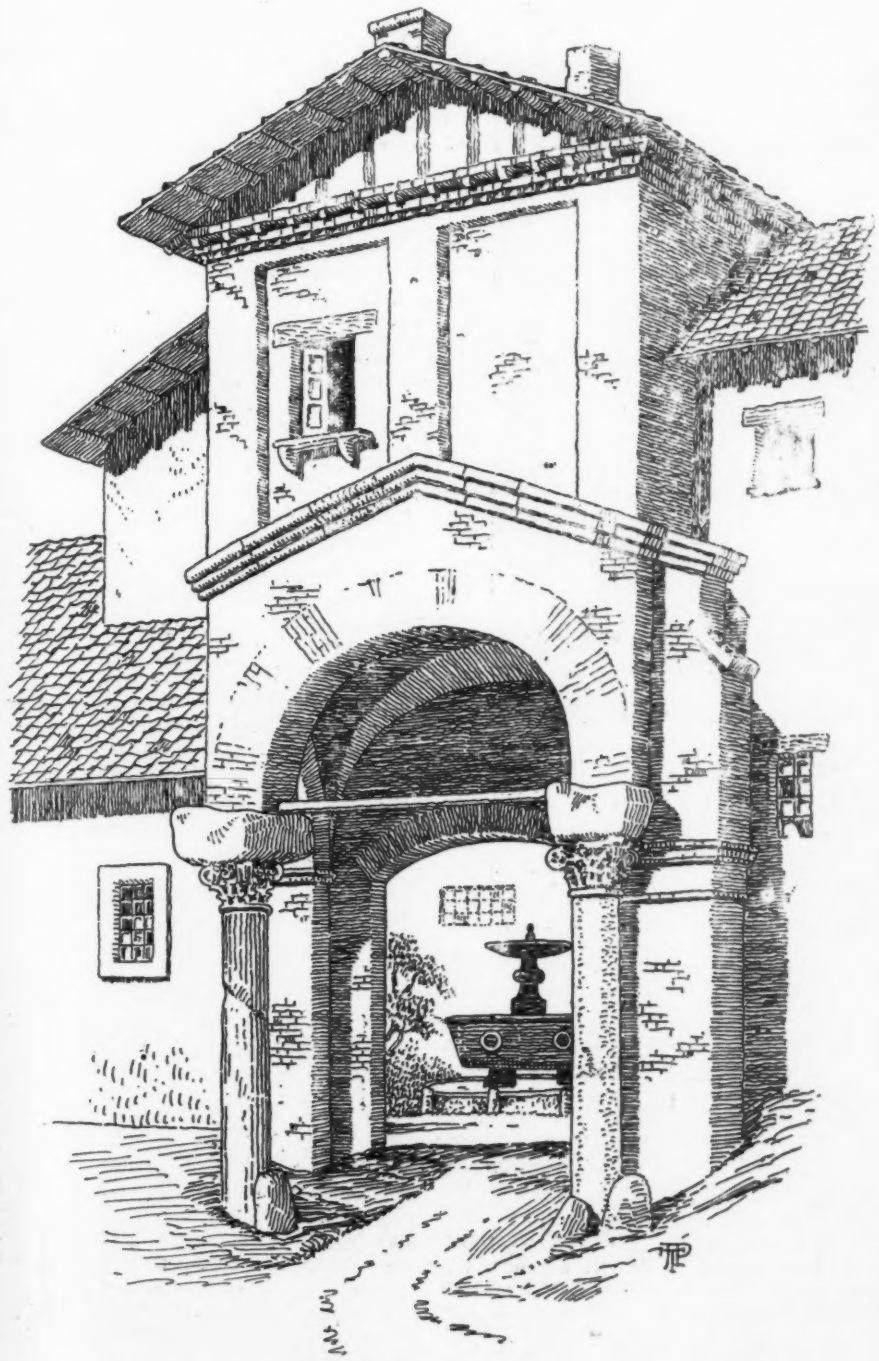
THE CAMPANILE AND KANTHAROS OF STA CECILIA IN TRASTEVERE, ROME.

BY J. TAVENOR PERRY.

ON turning into the open space which was once occupied by the atrium of the church we are struck by the remains, among so much that is modern, of two relics of antiquity—the marble kantharos which once occupied the centre but is now relegated to one side, put on a shelf as done with, and the brick bell-tower, one of the best preserved and most representative of its class left in Rome. The façade of the church has, however, been modernised, and the thirteenth-century paintings, representing scenes from the life of Sta Cecilia, destroyed except a small portion preserved inside the church. The interior was practically reconstructed by Cardinal Doria in 1725, leaving but little of the earlier structure, but sparing Arnolfo's altar above the confession.

The kantharos, or *calix marmoreus*, is the only one remaining in Rome in connection with the church to which it was originally attached and perhaps made for, from which flowed the water destined in ancient times for the washing of the faithful, and which in itself symbolised the refreshment which was to gladden the souls of the blessed in the celestial garden. These lavatories were always placed before the entrances to the ancient churches, and there was one such in the atrium of San Clemente, superseded at a later date by the present fountain; while a most elaborate one was placed by Pope Symmachus in the atrium of old St. Peter's and destroyed by Paul V. The pine-cone and peacocks now in the cortile of the Vatican once adorned this work, but the rest of the bronze was melted down to form the statue of the Madonna now standing on the column in front of Sta Maria Maggiore.

The campanile of Sta Cecilia, like that of S. Prassede, which has its date fairly established by its internal paintings, may belong to the early part of the ninth century and be part of the original structure erected by Paschal I. (817-824). Nevertheless, it has become so common to ascribe all the campanili to a date subsequent to the raid of Robert Guiscard in 1084 that this has been generally set down as having been built in 1120, forgetful entirely of the fact that the path of the devastating Norman through Rome was confined, within narrow limits, to the low-lying ground of the Campus Martius and the principal Fora up the slope of the Caput Africæ to the Lateran, touching neither the churches on the Esquiline nor those of Trastevere. But, apart from this, a comparison of the brickwork of this and other such towers with that, for instance, of the so-called Casa di Crescenzio at the head of the Ponte Rotto, which cannot be later in date than the next century, will show that most of them are much too coarse and rude in their details to be attributed to the twelfth century, which produced the Vassalecti and the Cosimati.



S. Cosimato, Rome.

THE PORCH AND ATRIUM OF SS. COSMA E DAMIANO IN MICA AUREA, ROME.

THIS church, situated in one of the most out-of-the-way parts of the Trastevere, still retains the outside porch which formed the entrance to its atrium, and shares that distinction with San Clemente and S. Prassede, both of which, however, have been reconstructed or altered at a later date. The church is generally known, for short, as S. Cosimato, but its full description of SS. Cosma e Damiano in Mica Aurea or in Vico Aureo is very ancient; and in a bull of John XVIII. dated 1005 the convent is designated *in loco, qui vocatur mica aurea*. The convent in the seventh century belonged to the Benedictines, and one Giovanni is mentioned in 685 as their first abbot, but in 1234 it was given to the order of S. Clare.

These facts make it abundantly clear that the porch may belong to a very early date. Like the other two already mentioned it is supported upon columns taken from some ancient building, which, in this case, are not pairs, one being a fluted marble composite column and the other plain. The capitals bear two rough marble blocks in place of the architrave, which, in the case both of San Clemente and S. Prassede, have been shaped on the front as a corbel and carried through to the walls behind to carry the superstructure. The porch and atrium of San Clemente were reconstructed, perhaps on a higher level, by Paschal II. (1099-1118), but probably in the main they were those once belonging to the old lower church as reconstructed by Adrian I. (772-795), and may therefore belong to the end of the eighth century; that of S. Prassede, though the church was modernised by San Carlo Borromeo, seems to be part of the original work of Paschal I. (817-824), and therefore these two are nearly contemporary. Such being the case, there is no reason to suppose other than that of SS. Cosma e Damiano is also ninth-century work.

The lavatory, which stands in the centre of the space once occupied by the atrium, is a large plain granite sarcophagus, shaped like a bath, and it is unknown when it was first placed here, but probably at the founding of the church; and in it, in 1741, was placed the present very simple fountain, breaking the utter silence of the place with the pleasant sound of falling water. The church was entirely rebuilt by Baccio Pintelli under Sixtus IV., but the mediæval brick campanile was spared, together with the great cloister now attached to a workhouse.

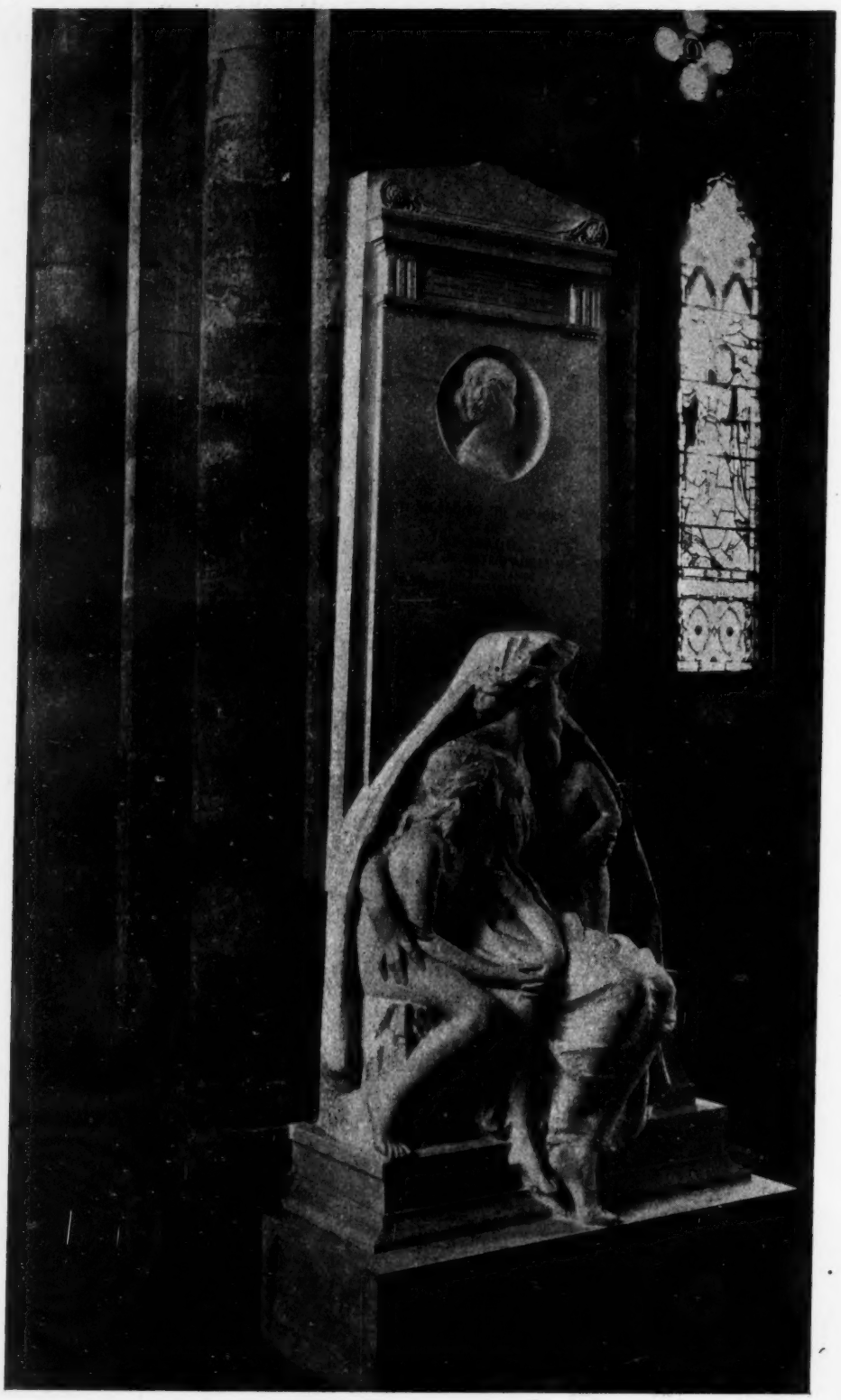
J. T. P.

THE FUTURE OF THE ARCH.

PROGRESSION is frequently marked by a change from simplicity to complexity, and then a reversion from complexity to greater simplicity, and the position held by the arch as a factor in architectural expression is an instance of these changes. Trabeation was mankind's earliest method of bridging space in Egypt, India, and Greece, and prevailing trabeation is likely to be the last word of science in dealing with wide openings, the arch representing the ingenuity of man in an age when scientific methods of dealing with the bridging of wide spaces were still unthought of. It is difficult to assess the extent to which what we term proportion is determined by some inherent æsthetic principle, and how much of it is due to conservatism of outlook, and it is more than possible that if stone had possessed greater tensile strength and lightness the whole proportion of intercolumniation which appeals to us as being satisfactory might have been affected and a different ratio established. As it is, the difference between the intercolumniation at Karnak and that of some of the examples of the later Renaissance marks the small range of change which has occurred in several thousands of years in æsthetic values.

After a century's use of structural ironwork we are still uncertain as to whether it can be accepted as a material capable of architectural treatment except to a small extent, and theorists who support the view that it can be so treated are usually unwilling to give ocular proof of their conviction.

The Romans accepted the arch as they accepted and used all known means of construction, using the shortest and directest method of solving their wants in the spirit of the modern engineer, unhampered by the



Monument to Mrs. Ashley, Romsey Abbey.

Messrs. Richardson & Gill, Architects. Mr. Emil Fuchs, Sculptor.

(From "Memorials and Monuments.")

one material the use of which seems to be æsthetically insoluble. Many of the apparent differences between the modern engineer and architect are undoubtedly due not to any inherent absence of æsthetic sense in the brain of the engineer, but to the fact that in the main he is compelled to work in a material the artistic method of using which still remains an enigma.

But the Roman, like the modern engineer, was unfettered in his outlook by prejudice in favour of any special forms or means of design, and the arch never dominated design as it did in later ages through deliberate choice. It was therefore left to the mediæval builders to work out the theory of the masonry arch in every conceivable manner to solve that great problem, the covering of internal space with the minimum amount of stone, used in comparatively small sizes by every device and method based on the arch as a principle. We do not need to dwell on the use of the arch in Byzantine and Saracenic work, as it held, comparatively speaking, a minor place in design compared with the dome—a simpler and easier method of covering space than an intricate system of vaulting, although the arch lent itself with more or less ease to methods of covering spaces of every form.

In spite of our knowledge of mechanics and stresses, it is hardly likely that mankind can ever excel the Gothic builders in their treatment of problems of vaulting; but, somewhat unfortunately for æsthetics, the gorgeous effects of stone vaulting can be applied rarely in modern architecture for practical reasons of cost and convenience, for the use of structural iron and concrete has given us easier and more economical solutions of the same problems, and with the disuse of the arch in large structural forms the use of the arched opening for door and window has been reduced to the position of a decorative adjunct in modern buildings. In the Renaissance, as in Roman architecture, the arch has an honoured place, but a subordinate one as a feature of composition in window or arcades, both as used in the early Renaissance and in every phase of the Venetian Renaissance, the Byzantine strain in which is very marked. As an adjunct in composition it must always be useful as a frame, for nothing unifies and controls the arrangement of smaller features so effectually as placing them between piers and under arched heads—a point made manifest in many successful designs for warehouses and commercial buildings, where we get the effect of piers and arches with the intervening lighter relief of partially-pierced screens composed of the windows of successive stories.

The use of rusticated treatment owes much of its effect to the arched openings usually employed, which emphasise and strengthen the effect of the general run of the horizontal lines.

But there is no longer room for the arch as a dominating feature in modern design, nor has the invention of man as yet found an efficient classical substitute for the traceried mediæval window, the alternative to which is usually found in the grouping of a number of smaller openings, while the curved ceiling has replaced the mediæval vault, and can be carried out in concrete and iron where the greatest permanence and strength are required. The well-known Renaissance method of starting the arch not directly from the column but from a species of dosserit formed by an entablature is one which is usually best avoided, unless the columns, as in the case of Sir William Chambers' entrance to Somerset House courtyard, are grouped, when it becomes a necessity; but these are minor points which must be solved by every designer in his own manner. Fortunately, the range of examples of almost any method of treatment afforded in different types and ages of the Renaissance is a very ample one, and the architects of Italy and France have given us the key to the solution of most of the æsthetic problems we meet in modern design. But arch, column, and Order alike have become the units of the composition of masses, the general nature of which is the building up of effects which are dominated by the horizontal line as thoroughly as mediæval design is governed by the predominating vertical line and the arch.

BOOKS.

Memorials and Monuments. By LAWRENCE WEAVER. (*Country Life* Series.)

MR. WEAVER has written an interesting and useful book which is specially apposite at the present time. In the introductory chapter the purpose of monuments is happily defined:—"They should point to lives finely lived, in which death was only the final and compelling incident. They should look from the closed effort to the continuing lives which are heartened by great memories." After recognising the value of those monuments which take a utilitarian form, such as chancel screens, windows, and buildings themselves, the author puts forward a plea for the more personal form of monument which is erected with no other purpose than that of remembrance, and, seeing what simple and inexpensive forms the personal memorial may take, we think Mr. Weaver is right, especially as such simple memorials have been so characteristically English. We remember a time when the monuments in Westminster Abbey seemed to us a defacement of a noble building, but we grow more tolerant with age in such matters, and prefer the added human interest which is given to a building by such historical records even when consistency of style in minor matters is sacrificed. The first part of the book is taken up by an historical sketch of the English monument from mediæval times to that of Kent, Canova, and Flaxman. The latter part deals with the designing of monuments, and the greater number of the 258 illustrations are devoted to modern examples. The art of monumental design presents greater difficulties in this than in past ages, for a monument frequently belongs almost equally to the province of the architect and that of the sculptor. In the past, especially during the Renaissance, the same man practised both of the two arts, whereas now the best results are only obtainable where an architect and sculptor work harmoniously together. A good example of these results is the very fine monument (Fig. 95) to Mrs. Ashley in Romsey Abbey, which is the joint work of Messrs. Richardson & Gill and Mr. Emil Fuchs, which we illustrate, while the more usual failure to secure such harmony is well exemplified by the monument to Ralph Caldicott by Mr. Alfred Gilbert (Fig. 56), in which the charming child's figure is badly framed by the weird architectural detail surrounding it. The perfect setting of a large monument is well illustrated by

Nelson's tomb in the crypt of St. Paul's, in which fitting use was made of a sarcophagus originally intended for Cardinal Wolsey's tomb, which is the work of Benedetto da Rovezzano. The memorial to George Frederic Bodley, R.A., in Holy Trinity Church, Kensington, designed by Mr. Edward Warren, is a good example of the refined use of a Jacobean type of design rendered especially appropriate by Bodley's descent from the great Churchman of the same name. Another fine monument is that of the Hon. Francis Meynell in Hoar Cross Church, Burton-on-Trent, designed by Mr. Cecil Hare, in which the kneeling figure is surrounded by a rich ogee Gothic canopy, appropriate in character to the church.

The book includes chapters on the Choice and Treatment of Materials, Brasses, Emblems and Symbols, Heraldry, and Lettering, and forms a useful and convenient volume of reference.

GENERAL NEWS.

Appointment.

The Eastbourne Rural District Council have appointed Mr. William Walker, Surveyor and Inspector of Nuisances to the Cannock Rural District Council, Staffordshire, as District Surveyor. Mr. Walker will commence his new duties early in October.

Classes in Architecture and Building Construction.

The London County Council announce that classes in architecture and building construction held at the Camberwell School of Arts and Crafts, Peckham-road, S.E., will reopen on September 20. Full particulars may be obtained on application to the Secretary at the School.

Helping Vienna Architects.

To alleviate the great distress the war has brought to architects, designers, sculptors, and other professional men, it is reported that the Vienna City Council has resolved to carry out work which will furnish them with moderate remuneration and at the same time add to the attractiveness of the city. As a beginning artistic drinking fountains will be erected in the grounds of new schools and in children's playing spaces in the public parks and gardens.

American Houses for Belgian and French Refugees.

Negotiations are in progress for the purchase in America of some 20,000 movable dwelling-houses, churches, schools, and shops on behalf of refugees in Belgian and Northern France, and it is anticipated that manufacturing firms in New York will receive their orders in time to begin shipment of the materials in the course of next autumn. The contracts will amount to many millions of dollars, and the portable houses will afford temporary shelter to the people while their homes are being rebuilt.

Memorial to Admiral Sir C. Cradock.

The tablet which will be set up in Hartforth Parish Church, near Richmond, Yorks, in memory of Admiral Sir Christopher Cradock, who went down in the *Good Hope* in the engagement near Coronel, has been designed by Mr. W. S. Weatherley, F.R.I.B.A., and executed by Messrs. John Underwood & Son, of Baker-street, W. The tablet, of marble from the ancient quarries near Athens, has a carved frame with mantle, on either side are the Admiral's flags at half-mast, and wings in Rosso Antico marble inscribed with gold lettering; the central panel bears a wreath of oak leaves in bronze around an anchor.

BOOK RECEIVED.

STRUCTURAL STEEL. Handbook No. 16. (R. A. Skelton & Co., Moorgate Station Chambers, E.C. 10s net.)

COMPETITION NEWS.

It must be understood that the following paragraph is printed as news, and not as an advertisement; and that, while every endeavour is made to ensure accuracy, we cannot be responsible for errors that may occur.

The list of current Competitions is printed on page 164.

Branch Libraries, Nottingham.

The assessor, Mr. Gotch, has now made his award in connection with this competition. The successful competitors are as follows:—Highbury-road Branch Library—First, Messrs. Lawrence, Bright, & Thoms; second, Mr. W. H. Higginbottom. Nottingham-road Branch Library—First, Messrs. Sutton & Son; second, Messrs. Sutton & Son. Bruce-grove Branch Library—First, Mr. F. W. C. Gregory; second, Messrs. John Howitt & Son.

The designs will be open to public inspection until September 4, between the hours of ten and twelve in the morning and seven and eight in the evening.

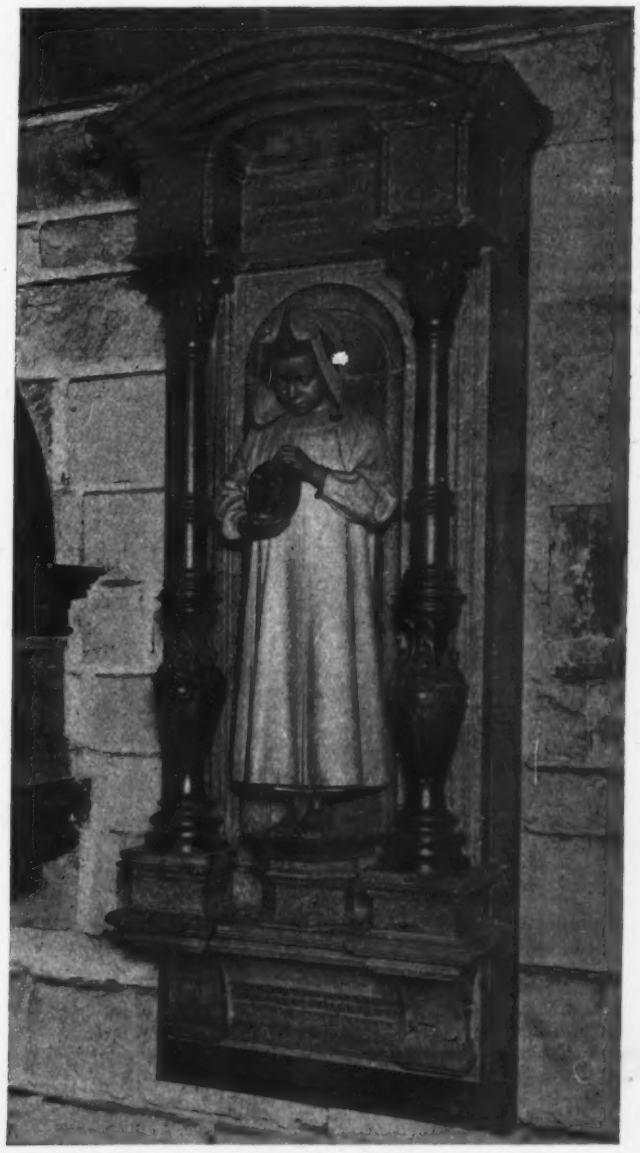
FIFTY YEARS AGO.

The New Law Courts.

ON Monday, and for some days past, workmen were busily employed in converting the old Insolvent Debtors' Court, in Portugal-street, into a court for the Commissioners appointed in connection with the new law courts. Considerable alterations are being made for the accommodation of the public. The Commissioners, it is expected, will commence business in about a month or six weeks, towards the end of the long vacation.

[*** We give the above extract from the *Builder* of August 26, 1865.]

The Temple Memorial, Westminster Abbey, 1679.



Monument to Ralph Caldicott, St. Paul's Crypt.

Mr. Alfred Gilbert, Sculptor.

(From "Memorials and Monuments." *See page* 154.)

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ILLUSTRATIONS.

Estate Development at Chelsea.

ARCHITECTS can draw up successful schemes for the development of property on architectural lines when they are in a position to disregard the individual speculator, but it is infinitely more difficult to do so when they are directly employed by those who wish to develop a district or locality in the way which is most likely to meet the requirements of the ordinary purchaser. It is comparatively easy with clients like the Duchy of Cornwall to carry into effect architectural schemes for the betterment of a district; it is very much harder to do so for a purely commercial speculation of a private character.

An architect might draw up a delightful Adam composition of grouped houses, excellently composed and planned, but the average private speculator would have none of it in the existing state of public opinion.

The merit of the work we publish is that it shows how architectural quality and amenity can be introduced into a number of independent designs, and when we consider roads like Fitzjohn's-avenue and Hampstead-hill-gardens, not to mention the newer part of Frognal, we are in a position to judge on its merits the admirable quality of the work we illlustrate.

The principal contractors on the estate were Messrs. T. Crossley & Sons, Bromley, Kent; Mr. R. Dixon, 1, Durrell-road, Fulham; Mr. William Hammond, York-road, Battersea; and Mr. J. E. Whiter, 89, Newington Butts, S.E.

The plumbing and hot-water work throughout has been carried out by Mr. C. Ellis, 51A, Blackstock-road, Finsbury Park, N., and the electrical work by Messrs. H. A. Lamb & Sons, 125, Fulham-road, S.W.

All bricks used on the estate have been supplied by Messrs. S. & E. Collier, Ltd., of Reading, and all tiling and slating has been done by Messrs. Roberts, Adlard, & Co., Queen Elizabeth-street, Tower Bridge, S.E. The asphalt work is by Messrs. Thomas Faldo & Co., Windsor House, Kingsway.

The principal stoves and kitcheners have been supplied by Messrs. Bratt, Colbran, & Co., 10, Mortimer-street, W., whilst Messrs. Weldon & Co., Idealis Works, Croydon, have been responsible for the iron casements and leaded glazing.

"Aecen Gill," Forest Row.

THIS house has just been completed at Forest Row from the designs of Messrs. Gerald Unsworth & Inigo Triggs, architects, of Petersfield. It is built of brick with upper story tile hung; the roof and tile hanging were hung with old tiles. On the ground floor are large living-room, drawing-room, dining-room, and morning-room, with kitchen offices, and above the first and second floors consist of fourteen bed and dressing rooms, bathroom, etc. The hall and several rooms are panelled. The site is picturesquely situated, and is surrounded on all sides by the links of the Ashdown Forest Golf Club; the gardens have been laid out by the architects, every advantage having been taken by a stream that runs through the property to form an *allée d'eau*, water gardens and pools. In the sunk garden is a picturesque well-house, shown in our illustration. The builders were Messrs. James Longley, of Crawley; Messrs. Rawlings were responsible for the electric lighting and Messrs. Rosser & Russell for the heating.

"Hallie," Liphook.

THIS house was recently built from the designs of Messrs. Gerald Unsworth & Inigo Triggs. The stone walls were obtained from two old cottages that were formerly upon another part of the site. The ground floor consists of three reception-rooms with kitchen, offices, and outbuildings, and above are six bed and dressing rooms, with bathroom, etc. The builders were Messrs. Fry & Son, of Godalming.

St. Barnabas Church, Mitcham, Surrey.

WE illustrate two exterior views of the Church of St. Barnabas, Mitcham, which has been built for the district (now formed into a separate parish) to which the energies of the City of London School Mission are devoted. The church (of which a plan and a drawing of the interior were published in the *Builder* on February 20, 1914) is built upon a site surrounded upon three sides by roads, and upon another portion of which a Parish Hall has already been built, while a further portion of the same site is reserved for the Parsonage House. The builders were Messrs. Allen, Fairhead, & Son, of Enfield. Mr. H. P. Burke Downing, F.R.I.B.A., of Westminster, is the architect.

THE WATCHING LOFT AT ST. ALBANS.

THE gallery, or "excutitorium," at St. Albans is one of the best of its kind in England; there are others for similar purposes at Lichfield, Worcester, Canterbury, and Westminster, from whence the monks could watch the principal shrine in the church; but for unique design and novelty of detail none approach the fifteenth-century example in the Chapel of St. Albans. A century ago there was published a small history of Verulam and St. Albans, and this curious book contains the following description of the structure which is called "The Watch Tower": "This is situated opposite to Duke Humphrey's monument, and probably claims as much the attention of the curious as any object in the abbey church. It is constructed of oak. In the upper part is a small room, which is ascended by means of a few clumsy steps; and here the devotees of Albanus's martyrdom perpetually watched his shrine; the interior is extremely plain and unornamented, but the outer part exhibits some excellent specimens of small carvings in wood, well calculated from their grotesque appearance to excite the risible muscles of the observer. The lower part is enclosed and divided into closets or cupboards, one of which is appropriated as a depository of ancient relics, which have been found at different periods in and about the church, and which, being generally shown to visitors, are therefore enumerated; description follows here."

Such is the brief account of this beautiful specimen of early fifteenth-century woodwork before the days of Pugin and Brandon, as reviewed in 1815.

The real purpose of the watching-loft was to provide a place from whence the treasures deposited by pilgrims and others on the shrine sepulchre of the martyr could be kept under close scrutiny. The shrine itself was erected in 1308, and the loft is attributed to the year 1420.

In the heyday of the Gothic revival, before Lord Grimthorpe's restorations were contemplated, all the leading architects made a pilgrimage to St. Albans to study the details of the famous abbey, and it became the custom to make careful drawings of the woodwork of the loft and extol its beautiful simplicity. A fine drawing was made by Thomas Arnold in 1860; but it is somewhat anomalous that the real truths of the design of the loft were never appreciated at their full value. Standing in front of the structure one is reminded of a low-storied fourteenth-century house with projecting front in miniature; and it is reasonable to suppose that such was the *motif* followed by the old craftsman, whose loving care revelled in good proportion and austere lines. The work was designed for the place it occupies. It gives the beholder the impression that it is an integral feature of the chapel and not an afterthought. The horizontal disposition contrasts most effectively with the arched lines of the arcade, and in these days of meretricious ornament the honest purpose of the design appears to full advantage.

Two architects spent four hours in the cathedral a fortnight since; one of these gentlemen knew every detail of the building, and described the interesting facts with easy familiarity to his friend. The friend, who is an authority on mediæval work, had never before visited St. Albans, and he was too depressed by the works of Lord Grimthorpe to enjoy the delectable feast offered to him. When every interesting item of the building's history had been seen, the latter remarked: "I have seen many examples of both mediæval and so-called modern Gothic joinery, but nothing yet to compare with the detail of the watching gallery." Before these gentlemen left the cathedral they paused to examine the modern choir stalls, bishop's throne and other up-to-date furnishings, which, by reason of their prim neatness, and for no other reason, momentarily attracted their attention. Both gentlemen viewed the scene of desolation with chagrin and then simultaneously voiced the displeasure they felt at the sight. "It seems as though the modern designer has surrendered all his scruples concerning explicit construction to the soulless practice of the machine, and has sacrificed honesty of purpose to an obsession for woodwork secretly jointed, thereby contravening the most important law of architecture." In sadness, they made their way to the station and so back to London.

The Watching Loft, St. Albans.

ARCHITECTURAL SCHOOLS SECTION.

AN ARCHITECT'S LETTERS TO A STUDENT:

THE TWENTY-FIRST LETTER.*

On Adjoining Owners.

YOUR letter telling me that you have a job on such a congested London site as you describe is full of interesting suggestion of difficulties to be overcome. I well remember the horrible sinking feeling I experienced on first visiting my initial venture in like conditions and finding the home of my new building under the fierce glare of "Ancient lights" from all quarters, and how rapacious surveyors called on me from every neighbouring property, longing to batten and grow fat upon the little architectural effort I was making in a dreary district. I used to divide these gentlemen into two classes—those who were actually instructed by property owners and had a genuine, or what they believed to be a genuine, case for interference, and those who themselves incited tenants to instruct them, and who were merely "out for money." Experience is required to differentiate between these groups, but something may be gathered from the tone and standing of the surveyors and their respective clients, in addition to the apparent merits of the cases. Now, although a man may be merely looking for money and have a weak case against you, I am far from saying that he should be entirely ignored, and, while always showing a firm attitude, generally speaking, the advicé to "agree with thine adversary quickly" is applicable, because much more time and money may easily be wasted in negotiations and legal processes than would be required to satiate the rapacity of the most greedy. Moreover, the law is uncertain and apt to lean in opposition to the man who is responsible for producing changes, and a good counsel can often convince a set of laymen that what an expert knows to be a purely frivolous grievance is a vital matter in the life history of his client.

In the initial planning of your building take time to consider the effect of your scheme on adjoining property, and have a complete survey of the surrounding walls and windows to work upon, so that you can include your neighbours' feelings in all your sections and elevations. This will not only prevent the overlooking of adjoining rights, but enable you to judge at once of the effect of your new creation, and hence of the validity of any claims made against you.

Now, although the rights of others must in general govern your design, it may be that some vital detail in your best scheme conflicts with an adjoining right, or that your clients insist upon such accommodation as to render infringement a necessity. In such a case it is probably best to approach the owners when your drawings are still in preparation, and, frankly explaining your proposals, make an offer of compensation, but such a course naturally should generally be taken with the approval of your clients. This has the advantage of enabling you to make it clear that if exorbitant demands are put forward you are in a position to modify your scheme. Compensation may be made in other than monetary ways. You may show, for example, that by undertaking the cost of enlarging a window or increasing the light obtained by the use of glazed brickwork an actual improvement in your neighbour's surroundings will be secured, or you may consent to confer upon him certain rights in the matter of his own future rebuilding in exchange for his foregoing present claims. The best way to get rid of these troubles is not to buy your neighbours off, but to buy them out, that is, to purchase their property and hence their rights, but this is a line of action which usually requires more financial liability than the ordinary client is willing to undertake. Nevertheless, in any scheme of importance, which generally takes some time to mature, it is well to look round the site in good time and advise your clients, if they need such advice, as to probable surrounding claims, when any question of purchase can be given due consideration, for it is hardly necessary to add that it is easier to obtain property at its ordinary market value before intention to build is divulged than at a later date, when it may have become obvious that such acquisition is very much desired.

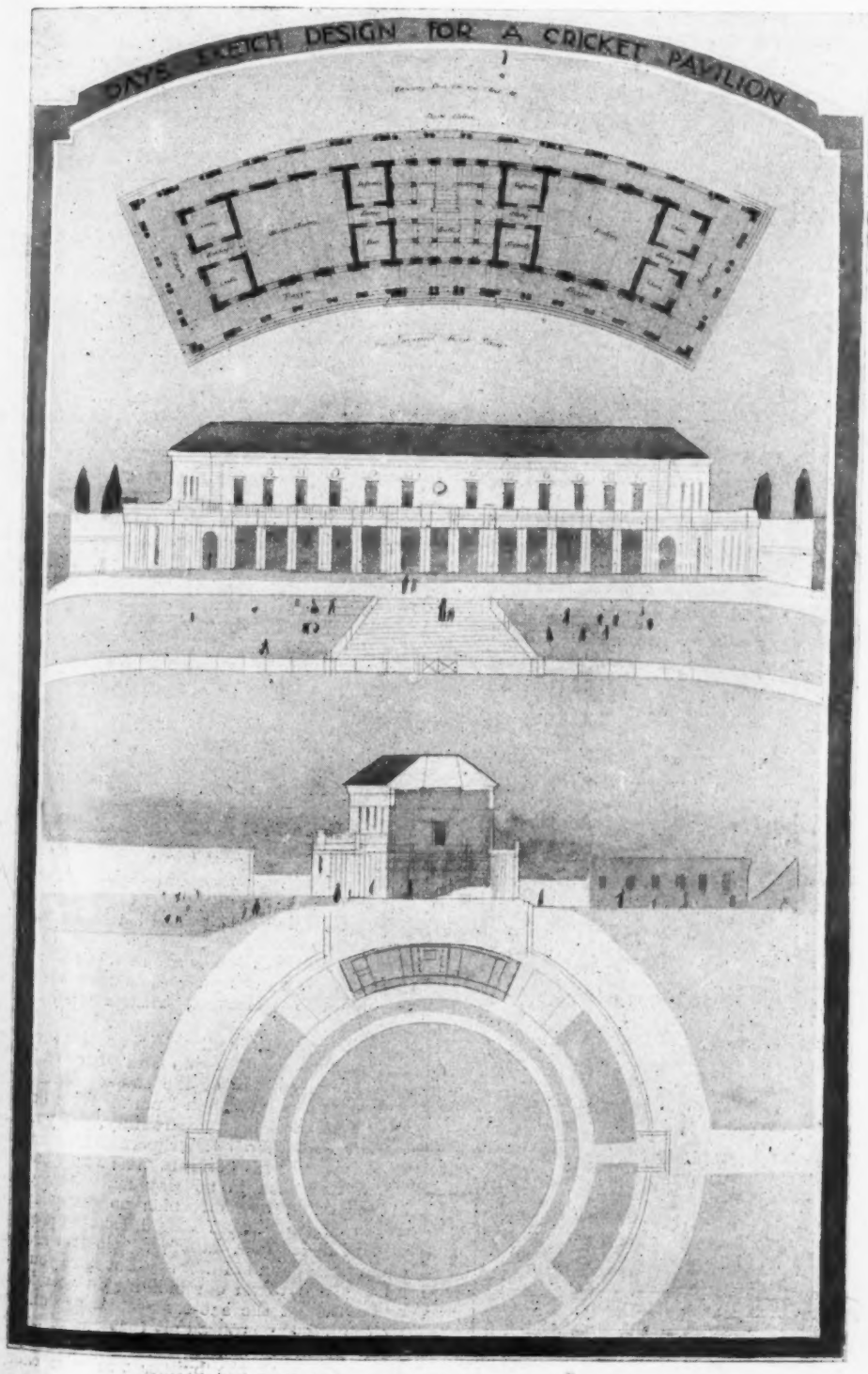
It will be obvious to you that what have been in my mind so far are chiefly rights of light and air. Many other rights, of course, exist, such as those connected with water, drainage, retention of soil and party-walls. You cannot drain your neighbours' soil in a manner detrimental to the stability of his buildings, nor cut off his pipes which may pass under your property, nor can you utilise walls and boundaries which are his without considerable risk of future, if not present, trouble. Party-walls, of course, are on a somewhat different footing, and your rights and obligations are clearly defined in London under the recent Building Act, but elsewhere there is no party-wall procedure legally laid down. Occasionally you will have to deal with party-floors as well as walls. This is a big subject, and I should only weary you by elaborating it. I will therefore merely conclude my letter by advising you before you commit yourself to dealing with party questions to ascertain, if you can, from reference to such deeds as are available, whether your neighbours really possess the rights they claim.

* For previous letters see our issues for March 27, April 24, July 24, August 28, October 23, November 27, 1914, and January 22, February 26, March 26, and July 30 last.

THE TWENTY-SECOND LETTER.

On Contracts.

Yes, it has been a long time since my last letter, but I am getting an old man, and writing becomes a labour; none the less I am very glad to try to collect my ideas upon contracts and to set them down. As you rightly say, it is only when one sees a dispute looming ahead that the importance of a contract and the conditions it contains really come home. "I have no use for contracts," an old country builder once said to me; "there's my price, you know I'm honest or ought to, and if you want to bind me up with law, which I don't believe in nor understand, you'd best let



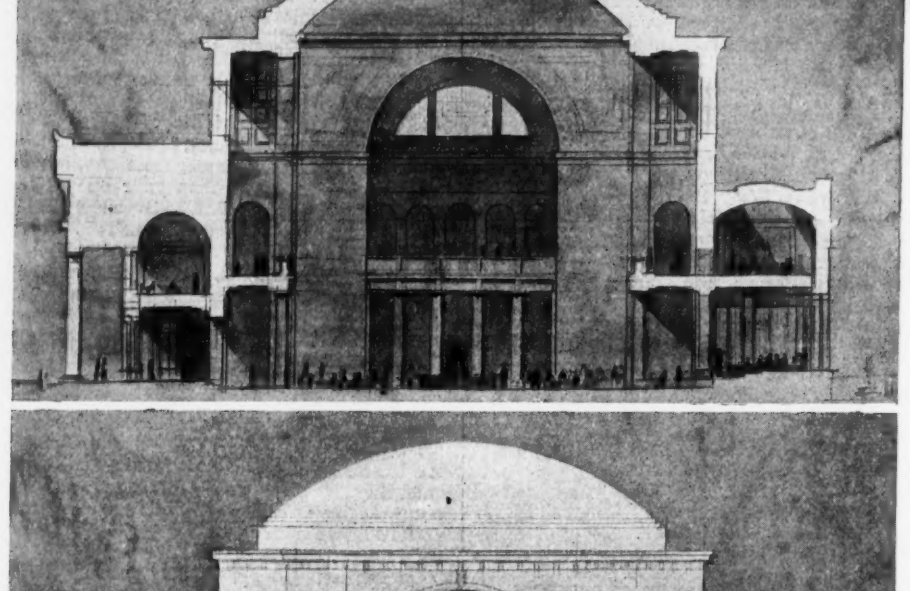
Students' Work, Liverpool School of Architecture.

Design by Mr. Gordon Hemm. (*See page* 159.)

things be." This fine spirit of trust and independence has worked well enough in many cases in the past, but is impossible in modern business life. Nevertheless, all contracts need not be equally formal; even a verbal undertaking may be absolutely binding, but so much care would have to be taken to substantiate it in case of dispute that this method of making agreements is never resorted to in matters of any moment. Usually a building contract between private persons is "under hand," that is a written contract signed by both parties, and to facilitate any possible necessity for proving the validity of such signatures, generally witnessed, though this can hardly be regarded as a legal obligation. When, however, the contract is between bodies, either of which possesses a seal, whether on the employer's side, *e.g.*, a corporation, or the builder's, when the firm is a registered company, the document must be under the seal or seals of the contracting parties. The necessity for this lies in the fact that a corporate body can only be held to its obligations under its seal, and as its individual members change it would be open to the successors of those who had negotiated and signed the contract to repudiate such action, and in spite of the obvious immorality of such a procedure, this has been done.

But I am not dealing with your questions, so a truce to generalities. In the first place, as to what can be fairly included in the requirement "everything necessary for the due completion of the works." These sweeping phrases obviously must have considerable legal limitations, otherwise they would be open to abuse resulting from mere idleness in neglecting to specify the work properly. Thus in work without quantities a builder might fairly be expected to provide centering for a window arch, though it would be wiser to refer to the provision of centres generally as his business in the specification. If, however, the course of the work revealed the fact that certain shoring was requisite, I do not think that he could be made to provide this without charge. The distinction may be made by saying that things which any reasonable person would regard as an essential to a particular piece of work defined as required by you should be included in that work, but that things for which you are paid to detail and enjoin as part of your professional duties are not to be pre-supposed without mention. If you have quantities, then the first question to be answered is whether they form part of the contract or not, and in answering this question you should remember that even if they do not form such a part by definition in the contract, should you use them as a basis other than a basis for prices only, in adjusting the final account—for example, should you require a rebate for certain works described in the quantities and not executed, which of course is usually the case—then by implication you make this document a part of the contract, and everything which has a financial value must be included therein. When quantities are taken, this is the usual practice and, morally, I consider that one's client is bound by the accuracy of such measurements unless the builder has been supplied with a detailed specification and a set of drawings and told that his tender must be based on them. Since, however, in such a case he would, for work of any magnitude, probably refuse to tender, we are brought back to the inference that when quantities are sent out they impliedly represent what is required. The moral is—specify and "take out" in the bills everything you can, and in doing so remember that the man who tenders has perhaps a week (which will comprise much other work) in which to acquaint himself with your proposed creation, which may have been maturing in your brain for a year, and in asking for his tender, therefore, try rather to help him by drawing his attention to points likely to be overlooked than to adopt the "he-ought-to-know" attitude.

More I cannot write now: indeed, this has cost me an effort, but I will deal with your second point ere long.



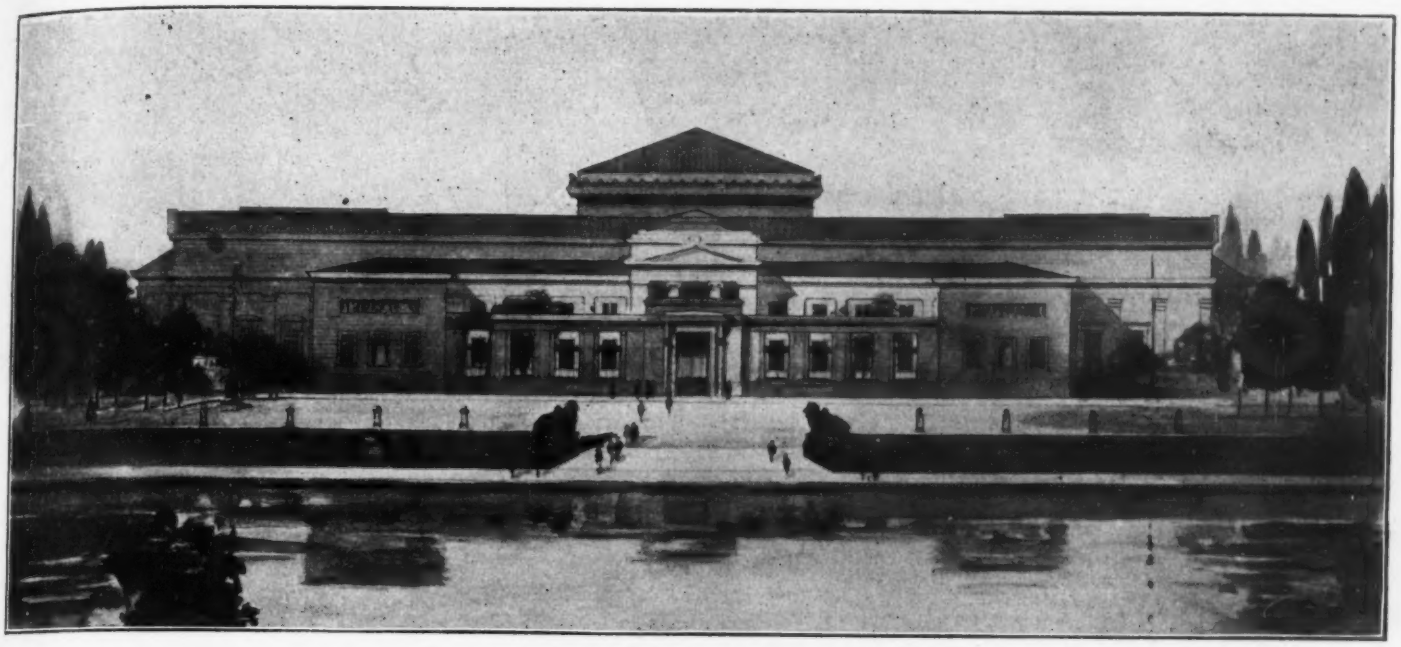
Students' Work, Liverpool School of Architecture: Design for a Domed Pump-Room.

By Mr. Gordon Hemm. (*See page* 159.)

THE TWENTY-THIRD AND FAREWELL LETTER.

When I tell you that I have hardly put pen to paper since my last letter to you, you will, I know, forgive so disjointed a reply to your questions on contracts, but I will try to make amends, and this the more cheerfully as I am glad to gather that your difficulties have been for a time quiescent, though now again obtrusive.

To determine a contract is a serious matter, and it behoves both you and your clients to look at all aspects of the subject before you take such a step, though I am far from begging the question of its undesirability. If you had a clear case of a builder persistently refusing to finish after his contract time a new building which had been in no way materially varied in execution, and on which no complications due to sub-contractors existed, I should probably say, without much dallying, "Go forward and claim your pound of flesh." But here you have an addition to an old building in occupation, and although the sub-contractors are all paid by the builders, you admit that one of them—your nominee—caused some delay early in the work, that the builder was wise enough to write you useful letters enlarging on this delay, and that the steel details were varied,



Students' Work, Architectural Association Schools: Design for a Conservatoire of Music.

By Mr. Niel Koch.

though not in a manner which need have caused more than a few days' loss of time. In my mind I can see the contractor's counsel with his "Now, sir, as my learned friend admits, the steelwork was varied by the employer's architect, and though the change is claimed to be trivial, I shall proceed to prove that this alteration had a most disastrous and far-reaching effect on the respondent's efforts to complete his contract." You may know, and he may know, that his tale is morally utter rubbish, but in making your calculations don't rely on equity.

You say that all the joinery is made and some fixed, and that the builder, though he has shown no contrition nor replied to your threat of ejectment, is still proceeding much as before with the work. Of course I realise the trouble he has given you and your clients and that revenge is sweet, but try to make your advice dispassionate, and let it include a critical summary of the financial aspect of the case.

First of all, how much time will be saved now by introducing a new contractor who cannot well make a start until a survey of the work now done is completed and questions connected with the builder's plant settled? This determined, what is the financial value of this saving in time to your clients? Next, what will be the cost of transferring the work to another firm and of the fees incidental to the necessary adjustments, as compared with the amount—to be carefully ascertained—which will remain after the work done has been paid for?

At the present rate of progress, assuming the present contractor to continue, what will be the amount on paper of the damages due for delay? Can you claim anything more, or indeed hope to get as much, as the result of legal action?

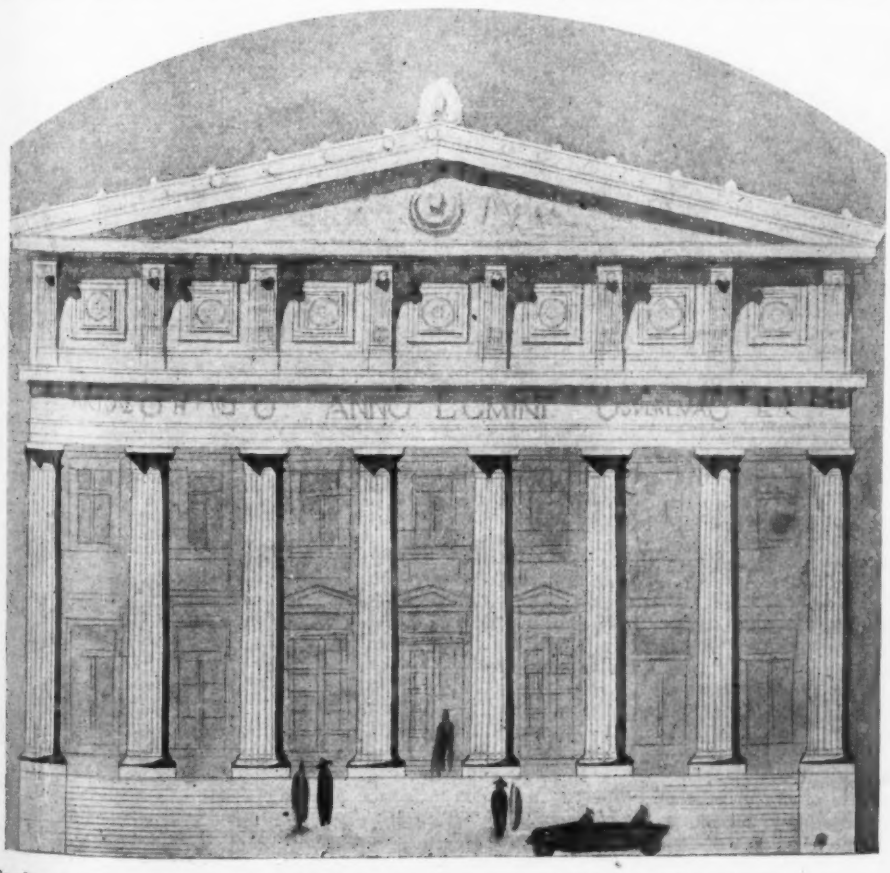
If the matter proceeded to arbitration or to the courts and you won your case with costs, it is hardly probable that the costs when taxed would really cover your expenses. Hence, if you have a good case I think you would be rash to press it to an issue unless, say, one-half of your fair claim would be sufficient compensation for the dislocation involved by the ejectment of the present contractor.

Alternatively, if you let your threat to determine the contract lapse, you can still endeavour to obtain penalties for delay at completion, you will have money in hand—a strong card—and should be able to reach some agreement giving you at least a small part of what you regard as your due without recourse to legal action if you have a good surveyor and your builder is not thirsting for litigation.

This may seem to be the advice of a shaky old man, and you may decide to neglect it, but don't do so without putting all the pros and cons before your clients, and do this and obtain their decision in writing, lest they turn again and rend you should things go ill. Now farewell and good fortune attend you! I fear that my letters cannot be many more.

Epilogue.

Farewell! Was it with some premonition that this last sentence was penned? Whether or not, these closing words formed, indeed, the last of the many kind and helpful messages which it was my good fortune to obtain from one who kept his promise so well, a promise to follow my career and live again his professional life in illuminating mine, for death with gentle hand closed that career soon after my thanks for his sound advice were written. True, as he said in my early days, the experience of the old cannot be handed on, but surely the benefits conferred by contact with an endearing personality who has trod one's own professional path are great, and can guide the careless steps of youth safely past many pitfalls. So let me replace the last of these letters, already marked by time, and fastening up the bundle restore it to its dark pigeon-hole, hoping that perhaps some others beside myself may have benefited by the publicity which I have ventured to give to these milestones in my own career.



Students' Work, Liverpool School of Architecture: Detail of Domed Pump-Room.

Design by Mr. Gordon Hemm.

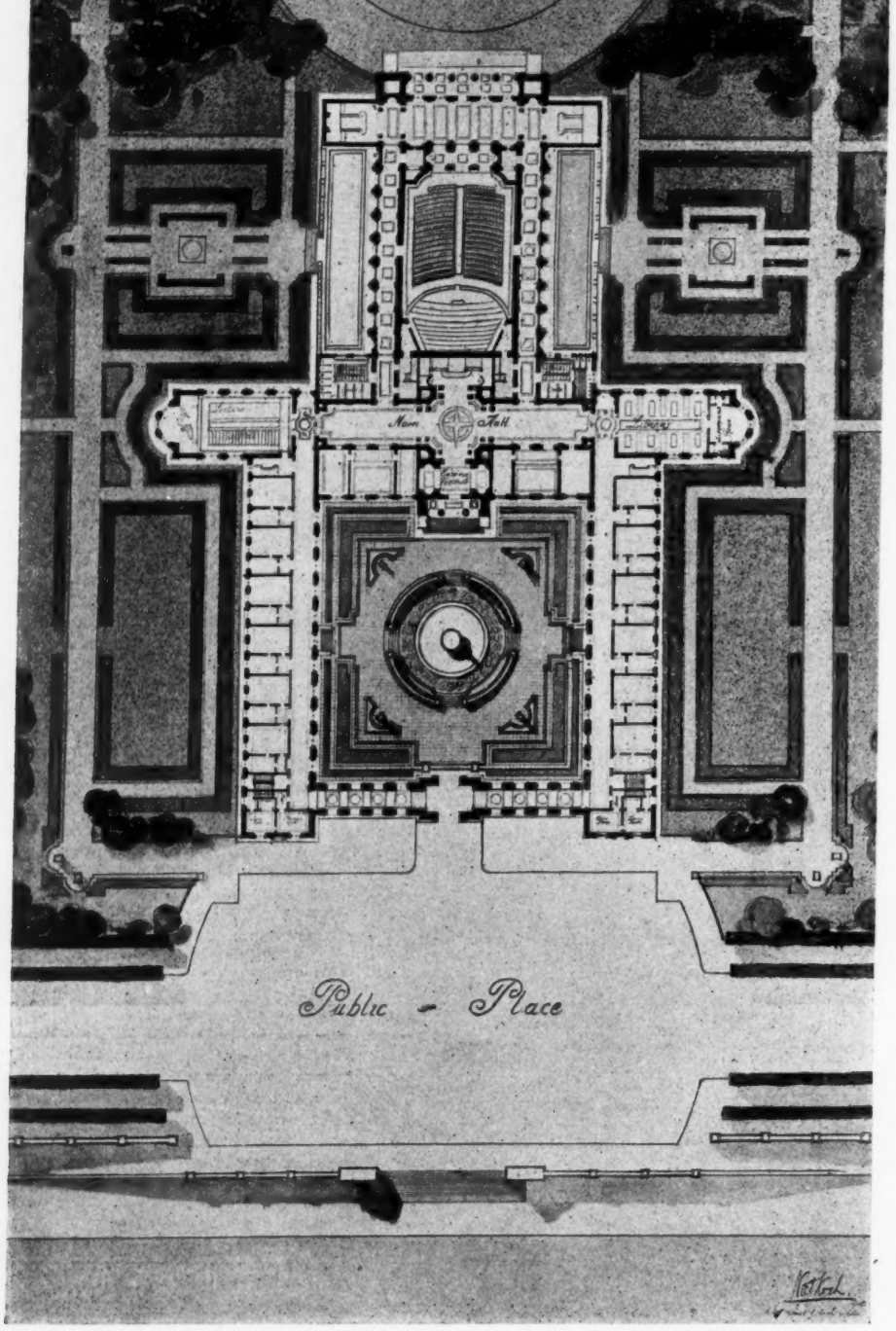
LIVERPOOL SCHOOL OF ARCHITECTURE.

THE three drawings which we illustrate are timed studies worked out for the (newly instituted) Certificate in Architectural Design. The large scheme was a design for a domed pump-room, with dome 80 ft. in diameter, the time allowed for working being thirty hours. This is the largest set of drawings that has been executed at the Liverpool School in the above time, and was highly praised by Professor Reilly. The other sheet was a design for a University pavilion, the time allowed for working being six hours.

DESIGN FOR A CONSERVATOIRE OF MUSIC.

THIS illustration represents the elevational perspective view of a Thesis study in design submitted for the R.I.B.A. Final Examination, showing the suggested treatment of a conservatoire of music for a riverside town.

The façade shown provides the principal entrance to the conservatoire through a screened



Students' Work, Architectural Association Schools.
Design by Mr. Niel Koch.

courtyard facing the river, flanked on each side by class and practice rooms. The entrance portico leads through a vestibule to a longitudinal hall, at one end of which is the library and at the other the lecture or small practice hall. The whole is surmounted by the concert hall in the background. The concert hall, though forming part of the conservatoire, can be used independently, and has a public entrance on the far side facing the main road of the town.

NIEL KOCH.

MATERIALS AND DESIGN.

IT is very interesting to note the influence on the design of any architectural work of the materials of which it is composed.

It has been well said that the debt that twentieth-century architects owe to the nineteenth century is a great one. Such men as Norman Shaw, Eden Nesfield, George Devey, and Philip Webb relit the torch which is now being carried on by a new generation, and not only established principles in traditional domestic design, but set out to rediscover the right use of material. This right use of material was the very essence of the old work, and may be said to be one of the chief characteristics of our best recent work, whose architects endeavour to use each material in such a manner that it may lose the least possible amount of its natural qualities, and that only so far as necessary to enable it to perform its work in the finished building. In other words, not only is great attention paid to the selecting of the materials, but the characteristic qualities and even idiosyncrasies of each are legitimately allowed to influence the design. To successfully accomplish this the peculiarities of each material demand sensitive and sympathetic attention. In old buildings the harmony between the designs as executed and the materials used in their construction was very complete. This harmony between material and design may be noticed not only if we take buildings as a whole, but also if we examine their minor or ornamental details. One reason why the harmony between design and material is more generally evident and satisfactory in ancient than in modern work, at any rate as regards decorative art, is accounted for by the fact that the design was usually made and executed by the same man. Another reason is to be found in the fact that the tools in those days were inferior to modern ones, for, to quote Moody, "Machinery and better tools and greater manual dexterity result in higher finish, but loss of severity and the characteristics of design due to the special qualities or intractability of the material." The rougher the tools and the less his skill, the less is the workman able to subdue the material to his will; thus the variety due to letting the material have its way, which was almost a necessity in old work, must now be allowed. In decorative work the complete triumph of skill over material leads to naturalistic work, as, for example, carving of the Grinling Gibbons type. In connection with this we may quote Alison: "I think it will be found generally that wherever the delicate forms of the vegetable world are executed in metal or any other hard and durable substance, the character of the form is lost, and that instead of that lively satisfaction of beauty which we receive from the original forms, we are conscious of a feeling of discontent, from the seeming impropriety of giving to such durable substances a character which does not belong to them." Now, although a too exaggerated view of the claims of material, especially in decorative art, would tend to unduly limit its possibilities and scope, yet most artists are now in favour of expressing the qualities of the material rather than the skill of the artist, which would tend to obliterate them.

We have thus, at extreme poles, two schools: those who would have the artist entirely subdue the material, through mechanical skill, and those who would give to the material complete control.

There is danger in going too far in either direction. Considering the first school, we must remember that mechanical skill is not art. In this connection we may quote Sir Joshua Reynolds: "For want of this distinction (*i.e.*, the distinction between art and mechanical skill) the world is filled with false criticism. . . . It is the same error which leads the vulgar to think it a beauty when the figures of a picture stand out 'as if you could walk round them,' or when painted decorations, or papering, or carpets are shaded to appeal (in a particular light) as if carved; or when a building, or a front of a building, or any the smallest part or member thereof, appears like anything which it is not; an essential part like an ornament, or an ornament like an essential part, a buttress like a column, an arch like a lintel; to say nothing of such gross frauds as making stucco look like stone or paint like wood." Considering the second school, we have said that it would impose undue restrictions; it would also render it impossible ever to execute a design in one material in another. But again to quote Moody: "Basket work has in all ages been imitated in stone; forms of pottery were imitated in bronze; and styles and panels, which are essentially wooden, are commonly rendered in stone; while in woodwork we find the compliment is returned, and not only cornices of an obviously stone construction, but the arch itself, which is essentially so, is over and over again executed in wood."

A CAPTAIN SCOTT EXPEDITION MEMORIAL IN ST. PAUL'S.

The Mansion House Committee of the Captain Scott Memorial Fund are, with the permission of the Dean and Chapter, about to erect a bronze bas-relief in St. Paul's Cathedral in memory of the explorers. The sculptor is Mr. S. Nicholson Babb, and the model was recently exhibited at the Royal Academy.

M. EGIDE ROMBAUX'S "LE PREMIER MATIN."

Last week Sir E. J. Poynter, P.R.A., formally presented to the National Gallery trustees M. Egide Rombaux's statue, "Le Premier Matin," which was purchased from the distinguished Belgian sculptor for £800, on behalf of the nation, by a large body of subscribers, including Sir Edward Poynter, Sir Thomas Brock, Sir E. Waterlow, Sir Aston Webb, Mr. D. Y. Cameron, Sir W. Goscombe John, Mr. G. Lavery, Sir W. B. Richmond, Mr. John Sargent, Mr. Hamo Thornycroft, R.A.A., etc. A sum of £868 was collected from 265 subscribers in three weeks—the balance will be given to the fund for relief of distressed Belgian artists. M. Rombaux, who is in Brussels, was represented by M. Paul Lambotte, Belgian Director of Fine Arts. The statue, to be placed in the Tate Gallery, is of a partly recumbent female figure, nude, of heroic size, and was in the R.A. Exhibition of the current year.

THE BUILDING TRADE.

THE NORTH-WESTERN FEDERATION OF BUILDING TRADES EMPLOYERS.

WE take the following from the first annual Report of this branch of the National Federation of Building Trades Employers of Great Britain and Ireland:—

Title.

The Federation was established in December, 1894, as the Lancashire Federation, but in March, 1898, having amalgamated with the Manchester, Liverpool, and District Federation, its title was changed to the Lancashire and Cheshire Federation. In April, 1899, North Wales being added, its title was again changed to the Lancashire, Cheshire, and North Wales Federation. In 1914 local associations in Cumberland, Westmorland, Shropshire, and Derbyshire having joined, its title was again changed on January 1, 1915, to the North-Western Federation of Building Trade Employers.

State of Trade.

The state of the building trade in the Federation area cannot be considered satisfactory. House building is practically at a standstill, at any rate so far as the speculative builder is concerned. Since the outbreak of the war contract work has been at a very low ebb. The disposition on the part of public and local authorities to hold up schemes (which but for the war would have been carried through) is mainly the reason for this depression in the trade. There is not that assistance and encouragement from the Local Government Board which in the early stages of the war we were led to believe would be forthcoming. The utmost difficulty is experienced in getting the Board's sanction to schemes which enterprising municipal bodies would like to enter upon.

There seems to be a general opinion amongst corporations and private owners that prices will go down after the war is over, and that it will be therefore prudent to postpone building schemes. We think, however, there is every reason to anticipate that when peace is in sight prices all round will reach a much higher level than they have yet attained. Much material will be required for rebuilding and reparation in France, Belgium, Poland, and elsewhere, and the abnormal demand will create extraordinary prices. Capital as well as materials will be diverted from normal channels, and money will be dear to borrow, while prospective labour troubles, due in some measure to the increased cost of living, are contingencies which it would be unwise to ignore. On this showing, to postpone building is to hazard serious future loss and inconvenience, and therefore we feel justified in reiterating our conviction that no better opportunity for building at fairly normal rates is likely to present itself within the next decade.

At the present time the Manchester Royal Exchange is being enlarged at an estimated cost of £600,000. This is by far the largest job in the district, excepting the Liverpool Cathedral, where the work is proceeding satisfactorily, the chancel and chapter house being almost structurally complete. A beginning has been made with the two transepts and the central space between the chancel and the nave, the columns having already reached a height of 50 ft. It is expected that the two transepts and the central space will be completed in two years, and, if that be accomplished, that portion, together with the chancel, will then be opened.

The Blackburn Corporation propose spending £9,000 on a new public hall, and a sanatorium is about to be erected at Rochdale at a cost of some £14,000.

The Liverpool Corporation have received the sanction of the Local Government Board to a loan of £24,500 for a smallpox hospital.

The City Council of Liverpool will not be allowed by the Local Government Board borrowing powers for the £11,500 required for the provision of working-men's dwellings, unless it can be shown that they are necessary for reasons of public health.

The Lancashire Asylum Board have resolved to apply to the Local Government Board for sanction to borrow £27,500 for the completion of the new annexe at Whittingham Asylum.

The Wigan Council have adopted, and will carry out after the war, a housing scheme which will embrace the construction of a small garden suburb, with bowling green, children's playgrounds, and foliage plots. Thirty-four houses will be commenced as soon as possible out of 100 suggested by the Local Government Board. Other sites will be secured as the scheme develops, as there is a great shortage of workmen's dwellings in Wigan.

The Local Government Board have given permission to the Ormskirk Urban District Council to erect a number of working-class houses in their district, and proposes that the Council should proceed with a proposal for the erection of fifty houses, half to be started almost immediately, so tenders will shortly be invited.

The Manchester City Corporation is seeking borrowing powers for £543,000 for the purpose of an electricity generating station at Barton. In connection with the scheme a Local Government Board inquiry was held at Manchester on May 21.

Messrs. Vickers have decided to build another 250 houses at Vickerstown on Walney Island to meet the requirements of the fresh workers who are continually coming in to Barrow.

The Local Government Board have given authority to the Corporation of Colne to prepare a town-planning scheme in respect of an area of about 836 acres in the borough.

Membership and Organisation.

The associations affiliated to the Federation now number sixty-nine, the organisation campaign being still very successful. During the year twelve new associations have been formed and affiliated to the Federation.

New Form of Contract.

The proof of the new form of contract was sent to all local associations and their criticisms and opinions asked for. Several associations went into the matter very fully, and in some cases legal advice was taken. The Sub-Committee is now considering these further suggested alterations, and it is expected that the newly-revised proof will be completed within the next few weeks. It is then proposed to send same to the architectural associations with a view to making it acceptable to all the parties concerned.

Relations with Operatives.

At the present time irregular notices for increases in wages and war bonuses are being received by almost all branches of the trade over the larger part of the Federation area, especially in Lancashire.

As all current contracts have been made upon the basis of the rates of wages embodied in the signed rules, and a large portion of the work that is going on was let prior to the war, or in its early stages, the Federation have passed a resolution that these irregular demands cannot possibly be entertained. It has been pointed out to the operatives that where advances have been granted such advances apply to certain trades, public bodies, and corporations, which are in a position to recoup themselves by higher charges.

The position of the building trade in all parts of the country is such that the longer the war lasts the less building work there will be to do, as so many people, including public bodies, are refraining from having work done owing to the high cost of buildings. This will throw an extra burden on the employers, because they have large establishment charges running even if there is no work to do. This, of course, will be a dead loss to them.

Any increase of wages would make the position for the near future worse, as it would tend to still further reduce what little work is likely to come out.

The present crisis is inflicting conditions on employers in the building trade which, from a financial point of view, are very heavy, but they accept the position, and it is only just that the workmen who remain in this country and are working under ordinary conditions should bear their fair share of any additional burdens which the war has imposed upon the nation at large. The employers, whilst in full sympathy with their workmen, feel that if these irregular applications are granted they would unjustly impose hardships upon employers who are executing contracts and who are already suffering to a considerable extent owing to the increased cost of materials.

THE YORKSHIRE FEDERATION OF BUILDING TRADES EMPLOYERS.

THE monthly meeting of the Executive Council was held at Bailey's Café, Scarborough, on August 20. Mr. Lewis Radcliffe (President) occupied the chair, and twenty-nine delegates were present.

National Demarcation Scheme.

The President reported that the National Federation had agreed, subject to the approval of the County Federations, to become parties to the national scheme for establishing Demarcation Committees for the building trade. It was resolved "That this Federation heartily approve of the principle of the appointment of Demarcation Committees, and supports the National Federation in signing the necessary agreement to become parties to the scheme."

National Conciliation Scheme.

The President reported that the London Order of Bricklayers had applied to be readmitted to the scheme, and that the United Builders' Labourers' Union and the Electrical Trades Union had also made application for admission. It was resolved that the Federation approve, so far as their consent is necessary, to these unions becoming parties to the scheme, subject to the societies only being admitted to membership in towns where they have working rule agreements with the employers' local association.

Belgian Builders' Relief Fund.

The resolution of the Executive Council of the National Federation recommending the County Federations to raise the sum of £200 per month, commencing September, 1915, in order that the assistance to Belgian friends may be maintained during the coming winter, was considered. It is proposed to allocate the amount in proportion to the number of representatives on the Council. There are fifty-six elected members, equal to a contribution per month of £3 11s. 6d. Yorkshire has six members, and the proposed allocation from the associations affiliated with the Yorkshire Federation is therefore £21 9s. per month, or £257 8s. per annum. It was resolved that the matter be referred to the Emergency Committee and that particulars be obtained of the amounts contributed to date.

National Insurance Act, 1911-15: Refunds under Sect. 94.

Members were reminded that no application for refunds for 1914–15 can be entertained unless made on the prescribed forms and not later than September 17, 1915. Applications should be made to the Local Labour Exchange for the necessary forms and the explanatory memorandum in connection therewith.

LONDON ASSOCIATION OF MASTER DECORATORS.

A MEETING of the Council was held at the Secretary's offices, 14, Queen Victoria-street, E.C., on the 26th ult.

A letter from Mr. Mawer Cowtan-Cowtan was read, in which he allowed himself to be nominated for the Presidentship for 1915–16, provided that he would not be called upon to take up his duties until October. It was resolved that Mr. Cowtan be nominated and recommended for election at the forthcoming annual general meeting.

It was resolved that the Vice-Presidents be recommended for re-election, with the

addition of Mr. Andrews, of Beckenham, and that Mr. J. J. Honeychurch be re-elected Hon. Treasurer.

The draft annual Report prepared by the Secretary was read and adopted as amended.

The question of altering the date of the annual general meeting was duly discussed, and it was resolved that the same be postponed till October. The question of holding the annual dinner was also considered, and, having regard to the fact that the annual dinner was not held last year, it was thought desirable that a re-union should take place this autumn, and it was resolved that a dinner be arranged to be held on the same evening as the annual general meeting.

The question of proceeding with the propaganda work was fully discussed, and it was thought that, owing to the unsettled state of the trade caused by the war, the present was not a fitting time to pursue the matter further. It was resolved that Mr. C. L. Roberson be nominated by this Association as Vice-President for the National Association, and that Messrs. T. S. Rowden, J. Anderson, W. Stewart-Greene, A. G. Rhind, F. de Jong, and F. Dakin be nominated to the Council.

Mr. Norton was elected a member of the Association.

A complaint made by the Operative Society that men on various jobs were allowed, and in some cases encouraged, to work overtime without additional rates, was further referred to, and the Secretary was instructed to communicate with the firms whose names had been mentioned by the Operatives' Society.

The Secretary reported the position as between the Association and the National Light Castings Association on the question of discounts, and it was left to him to arrange a meeting between the Committee and representatives of the National Light Castings Association.

Mr. John Anderson reported a meeting of the National Association *re* wall-paper discounts, a deputation having been arranged to meet the manufacturers and protest against further decreases in discounts.

The President reported a visit by members of the Association to the London County Council School of Building, Brixton, very kindly arranged by Mr. Richards, the Principal of that school.

ELECTRICAL HOUSES AT DUMBRECK, GLASGOW.

ELECTRICITY offers such advantages in cleanliness, convenience, and comfort that it is not surprising to find it daily growing in favour by the modern housewife, particularly when applied to cooking and heating it eliminates much of the drudgery from the home, besides possessing undoubted hygienic properties. An electrical garden city fittingly describes the latest development, in the form of a number of neat and compact villas, erected on a charming little estate called "Hazelwood," situated at Dumbreck, a comfortable car journey from the centre of the city of Glasgow. According to Mr. Lackie, Chief Electrical Engineer of the city, these are the first houses where domestic requirements are entirely dependent upon the electric power. These villas, which have been erected by a well-known Glasgow firm, are built in several sizes of four, five, and six apartments. The fires in the principal rooms of these model houses, particularly the drawing rooms, were supplied by the Carron Company, Carron, Stirlingshire, and comprise several of that company's newest types. These fires have an appearance which differs little from an ordinary coal fire, while the standardised elements with which they are fitted are easily interchangeable. This type of fire is most reliable in action, portable, and inexpensive in first cost and maintenance, and, being artistic in design, considerably adds to the decorative effect of the room. The cookers, which are by the same firm, are of the No. 304 and 305 types. The ovens in these cookers are double-cased, and packed with heat-retaining material, exteriors being of moss-green porcelain enamelled steel sheets. The interiors are mottled white and grey porcelain enamel lined, the raised parts, including hob, which is fitted with boiling plates and grill complete, are ground and polished, and all heating elements are standardised and removable. Indicating switches, fuses, and pilot lamps are supplied to each cooker, the pilot lamps indicating at a glance whether the current is on or off, thus avoiding waste of electric energy. Hot-water heaters are placed in the bathrooms immediately over the taps, and, being near the delivery, loss of heat by long pipes is obviated. As some indication of the economy and efficiency of electric cooking, it might be mentioned that a breakfast can be prepared and served in the time usually required to make up a coal fire, and, according to tests taken by Mr. Hamilton during the month of June, the cost for cooking, lighting, and heating for six persons worked out at 8d. per person per week.

PROPOSED NEW BUILDINGS AND OTHER WORKS.*

IN these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works, at the time of publication, have been actually commenced. Abbreviations:—T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; L.G.B. for Local Government Board; B.G. for Board of Guardians; L.C.C. for London County Council; B.C. for Borough Council; and P.C. for Parish Council.

ABERDEEN. — Plans passed:—Two dwelling-houses on the south side of Hilton-avenue, for Messrs. Joseph Shirras & Sons, builders; six dwelling-houses on the north side of Ashley-gardens, for the Northern Garden Suburbs, Ltd.; two dwelling-houses on the west side of Brighton-place, for the Northern Garden Suburbs, Ltd.

Barmouth.—Plans of new houses on Hendre-mynach-road, for Mr. Collyer, have been approved.

Barnet.—Plans for sanitary conveniences at the gasworks, Albert-road, and for alterations and additions at the Church Schools at East Barnet, have been approved by the East Barnet Valley U.D.C.

Battle.—The U.D.C. has decided to apply to the L.G.B. for sanction to borrow £950 for sewage disposal works.

Brazil.—The *Diario Official* (Rio de Janeiro) publishes a decree authorising the "Companhia Estrada de Ferro São Paulo—Rio Grande" to arrange for the strengthening and repair of bridges on the Paranaguá—Ponta Grossa section of the Paraná Railway. The cost of the works to be undertaken must not exceed 1,063,546 milreis (about £55,400 at current rate of exchange).

Burton Hastings.—The old parish church at Burton Hastings, near Nuneaton, is to be restored. The edifice, which is in the Early English style, anciently belonged to the monastery of Nuneaton. It is proposed to put all the stonework into thoroughly good order, to complete all necessary repairs to the windows, to do all that is necessary to the tower and porch, to take off the present roof of the chancel and substitute a new barrel roof, and to effect many other necessary alterations and additions. It is hoped eventually to put the bells in order, to erect a chancel screen and a new pulpit. It is further proposed to reseat the church, either with chairs or with benches.

Canada.—The Imperial Trade Correspondent at Toronto (Mr. F. W. Field) reports that a large company operating a departmental store in that city has decided to build a warehouse at Regina, Saskatchewan, at an estimated cost of 150,000 dollars (about £30,800); and that a company operating large departmental stores at Toronto and Winnipeg has decided to erect a factory at Hamilton, Ontario. The names of the companies can be obtained at the Commercial Intelligence Branch of the Board of Trade, 73, Basinghall-street, E.C.

Cheadle.—Plans passed by the U.D.C.:—Mr. H. C. McCulloch, for two cottages in Birch-road, Gatley; Mr. T. W. Hooley, for alterations to shop, No. 2, Mellor-street, Cheadle Hulme; the Oil Wells Engineering Company, Ltd., for additions to works; Mr. T. Moran, for additions to Nos. 21 and 23, Seymour-road, Cheadle Hulme.

Chesterfield. — Plans passed: — Clubhouse, Rother Vale-road, for the Workmen's Club Committee; store, Holywell-street, for Messrs. Eyre & Sons; two houses, Eyre-street, for Mr. S. Holmes; house, Storforth-road, for Mrs. Derry; four houses, Spital-lane, for Messrs. J. Collis & Sons; house, Old Hall-road, for Mr. Gibbons.

Christchurch.—A L.G.B. inquiry has been held in reference to the scheme of the T.C. for the surface-water drainage of the Avenue-road district, and into the drainage scheme in connection with the added areas.

Clydebank.—The Dean of Guild Court has given permission to Messrs. John Brown & Co., Ltd., shipbuilders, to form a new street off Clyde-street and to erect seven tenements. The houses will be of one room and kitchen and of two rooms and kitchen, with bathrooms and lavatories. They form part of a workmen's housing scheme which Messrs. Brown have undertaken, eight tenements being at present in course of construction in Clyde-street.

Dublin.—The tender of Messrs. G. W. Scott & Co., 26, Ushers-quay, Dublin, has been accepted by the Commissioners of Public Works for the erection of boiler house and heating station at the Science and Art Museum.

Foilogohig.—The Commissioners of Public Works have accepted the tender of Mr. J. J. Coffey, Broderic-street, Midleton, Co. Cork, for the erection of a national school.

Godalming.—A L.G.B. inquiry has been held into the application of the T.C. to borrow £1,900 for making two boreholes and laying water main.

Hendon.—Plans have been approved by the R.D.C. of a large house, called Old Barn, Clamp-hill, Harrow Weald, for Mr. A. W. Cox, of 30, St. James's-place. The house will be the re-erection of Besford Court, an old mansion near Worcester, which has been purchased by Mr. Cox, and which, together with the grounds at Harrow Weald, has cost nearly £50,000.

Kingstown.—The U.D.C. has decided to divide their housing scheme into two parts, and to appoint Mr. J. Robinson as architect for one part and Mr. Robert Donnelly for the other part.

London.—As the demand for storage space at the docks of London is still unsatisfied, the Port of London Authority have decided to put in hand immediately the provision of considerable further accommodation. Additional sheds of an area of 48,600 sq. ft. are to be provided at Millwall Dock. At the Royal Victoria Dock it has been arranged to re-erect a shed with an area of 49,000 sq.ft. which formerly occupied the site of the new cold storage sorting shed at the Royal Albert Dock.

Lutterworth.—Plans for alterations to Wycliffe Foundry approved.

Nottingham.—The T.C. have agreed to lease 12 acres of land to the Government for an engineering factory.

Peterborough.—The R.D.C. have been informed by the Mayor of Peterborough of his intention to build on land at Paston, explaining that the matter was urgent, and offering to submit plans in due course. It was agreed that the Council should afford Mr. Williamson all the facilities in their power. The Surveyor said there would probably be forty houses erected in the next twelve months, and the number was afterwards to be made up to 100.

Rotherham.—House, Clifton-crescent South, for Mr. J. Bygate; four houses, Erskine-road, for Mr. H. James.

Shrewsbury.—The T.C. have under consideration several sites for the new Town Hall and Municipal Offices. The one most favoured is that on the right-hand side of the main entrance to the Quarry, now a garden, and part of the property of the borough.

South Africa.—The municipal authorities of East London (Cape Province) propose to raise a loan of £253,000 for an additional water supply system in the King William's Town district.

Spain.—The *Gaceta de Madrid* notifies that projects are invited by the "Direccion-General de Obras Públicas, Ministerio de Fomento," Madrid, for the construction of strategic railways:—(1) from Estada and Tamarite to Balaguer, and (2) from Gibraleón *viâ* Paimogo to the Portuguese frontier. The lines will be of metre gauge. The minimum weight per lineal metre of the rails to be used will be 30 kilogs. (66 lb.). The troop trains must have a speed of at least 25 kiloms. (about 15½ miles) per hour. Projects for electric traction will be considered. The projects will be received at the "Dirección-General," as above, up to February 19, 1916, in the case of (1), and November 20, 1915, in the case of (2).

Swansea.—The Swansea Vale Spelter and Zinc Ore Reduction Works, which were erected and until quite recently controlled by certain Germans, have been taken over and will henceforth be under the control of an entirely English group, with the consent and approval of the Government. The works will be immediately enlarged upon an extensive scale.

Wexford.—The U.D.C. have appointed Mr. Donnelly (of the firm of Messrs. Donnelly & Moore, Dublin) as engineer in connection with the new cottage scheme.

Yeovil.—A plan of a dressing yard in Victoria-road, submitted by Messrs. Clothier, Brooks, & Shire, has been approved by the T.C.

* See also our list of Competitions, Contracts, etc., on page 164.

TRADE NEWS.

The roofs and floors at the Faringdon Police Station have been given a waterproofed cement treatment. We understand that the result of the Pudloed work was very satisfactory.

Boyle's latest patent "Air-Pump" ventilators have been adopted for the swimming bath at St. Paul's Schools, Hammersmith, London, W.

The Lift and Hoist Company, Premier Ironworks, Deptford, have installed the lifts at the premises of the British Dominions General Insurance Company, Ltd., in Finch-lane and Royal Exchange-avenue, E.C.

Messrs. Revy, Phillips, & Co., Ltd., 181, Queen Victoria-street, E.C., have sent us particulars of their "steam-water" non-pressure unit heating system, which claims, among other advantages, the positive and rapid heating of each radiator, each radiator being an independent unit and the temperature thereof automatically controlled. It is described as a system of central heating which has all the advantages of the low-pressure steam and of the hot-water systems.

The Rochdale Infirmary is being supplied with Shorland's warm-air ventilating patent Manchester grates and patent Manchester stoves with descending smoke flues, by Messrs. E. H. Shorland & Brother, Ltd., of Failsworth, Manchester.

NEW COMPANIES.

THE undermentioned particulars of new companies recently registered are taken from the Daily Register compiled by Messrs. Jordan & Sons, Ltd., Company Registration Agents, Chancery-lane, W.C.:—

GELLIGALED COLLIERY COMPANY, LTD. (141,188). Registered August 5. To acquire the undertaking and property of the syndicate trading under the name of the Gelligaled Colliery Company. Also to enter into an agreement to carry on business of colliery proprietors, waggon builders, manufacturers of bricks, pipes, tiles, cement, etc., converters of iron and steel, builders, carriers, etc. Nominal capital, £15,000, in 15,000 £1 shares.

HENRY SMITH (WOLVERLEY), LTD. (141,266). Registered August 13. To acquire and take over business of builders and contractors, now carried on at Wolverley and Kidderminster, Worcester, under style of Henry Smith. To enter into an agreement and to carry on business, in the United Kingdom and elsewhere, of church builders and restorers, drainage and sanitary engineers, bricklayers, paviors, hawliers, stonemasons, sculptors, carpenters, ironfounders, electrical engineers, etc. Nominal capital, £1,000, in 500 £1 ordinary shares and 500 £1 cumulative preference shares.

JEFFERY & SON, LTD. (141,172), 18, Forster-street, Lawley-street, Birmingham. Registered August 3. To enter into an agreement to conduct, enter into, and carry on, in the United Kingdom and elsewhere, the business of builders and contractors of every description, and to deal in or make all goods used or dealt with in connection therewith, etc. Nominal capital, £2,000, in 2,000 £1 shares.

JOHNSON & KNIGHT, LTD. (141,236), 17, High-street, Wanstead, Essex. Registered August 10. To acquire and take over business of builders and decorators, carried on at 17, High-street, Wanstead, under style of Johnson & Knight, and to enter into an agreement to carry on business of builders, decorators, architects, brick and tile makers, lime burners, house and estate agents. Nominal capital, £1,000, in 1,000 £1 shares

TRADE CATALOGUE.

Messrs. Frederic Braby, of Glasgow, have just completed large extensions to their steel constructional workshops, to enable them to cope with an increasing demand for steel roofs and girders, steel-framed buildings, bridges, and other steel structures of every kind, light and heavy. The new extensions are equipped with the most modern plant and machinery for quick and economical production. We have before us an interesting booklet, which gives illustrations of different parts of the firm's new works, and also illustrations of the footbridges, water towers, and other work which they make, accompanied by a short description in English, French, and Spanish. We are glad to see the firm leading the way, not only as they have done in the past by first-rate workmanship, but also by the business enterprise which recognises that it is wise to address the foreigner in his own language, and we may add, to give dimensions and sizes in the metric measurements to which he is accustomed.

WORKS FOR H.M. OFFICE OF WORKS.

The following tenders were accepted by H.M. Office of Works during July:—*Building Works:* Eastcote Alien Camp, sewage disposal works, Messrs. Beesley, Son, & Nichols, 11, Victoria-street, S.W.; Munitions Department, temporary building, Messrs. Holloway Bros., Ltd., Bridge Wharf, Grosvenor-road, S.W.; Royal Mews, new flats, Messrs. Dove Bros., Ltd., Cloudesley-place, Islington, N.; Victoria and Albert Museum, external painting, Messrs. T. W. Heath, Ltd., 154, Cromwell-road, South Kensington, S.W.—*Engineering Works:* Birmingham, new telegraph factory, cooking apparatus, and hot-water supply to lavatories, Messrs. McDowall, Stevens, & Co., Ltd., 4, Upper Thames-street, E.C.; Eastcote Alien Camp, electrical work, Messrs. Pinching & Walton, 52, Cannon-street, E.C.—*Miscellaneous:* Eastcote Alien Camp, joinery, Messrs. Austins (East Ham and Ilford), Ltd., Greenlane, Ilford; Estate Duty Office, steel shelving, Messrs. W. Lucy & Co., Ltd., Eagle Ironworks, Oxford; Islington Postal Stores Extension, fittings, Messrs. Sims & Wood, Ltd., 174, Gray's Inn-road, W.C.

RATES OF WAGES IN THE BUILDING TRADE.

THE following are the present rates of wages in the Building Trade in the principal towns of England and Wages. It must be understood that, while every endeavour is made to ensure accuracy, we cannot be responsible for errors that *may* occur:—

—	Masons.	Bricklayers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Masons' Labourers.	Bricklayers' Labourers.	Plasterers' Labourers.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Aberdare	9	—	9½	9½	—	9	8	6½	6½	6½
Accrington	10	10	9½	9½	9	9	9½	6½	6½	6½
Altrincham	9½	10	10½	10	8½	10	9	6½	6½	7
Ashton-under-Lyne	10½	10½	10	10½	9	10	9	6	6	7
Barnsley	9½	9½	9½	9½	9	9	8½	7	7	7
Barrow-in-Furness..	9½	10	9½	9½	9½	9½	9½	7	7	7
Barry	9½	9½	9½	10	—	9	8½	6½	6½	6½
Bath	8½	8½	8½	8	7½	8	7½	6	6	6
Bedford	8	8	8	8½	8	9	6½	5½	5½	6
Birkenhead	11	11	11	11½	11	11	9½	7	7	7
Birmingham	11	11	11	11	10½	11½	9½	8	8	8
Bishop Auckland..	9	9	9	9	10	9	7½	6	6	6½
Blackburn	10	10½	10	10	9½	10	9½	6½	7½	7½
Blackpool	10½	9½	9½	9½	8½	9	8½	6	6	6
Bolton	10	10½	10	10½	10	10	9½	6–7	7	7
Bournemouth	8½	9	9	9	8½	9	8½	6½	6½	6½
Bradford	10	10	9½	9½	9½	10	8½	7	7	7
Bridgwater	6½	6½	6½	6½	6½	6½	6	4	4	4
Brighton	9	8½	8½	8½	—	8	7	6	6	6
Bristol	10½	10½	10½	10½	—	10½	9½	7½	7½	7½
Burnley	10	10½	9½	9½	8	9	9½	7	7	7½
Burton-on-Trent ..	9	9	9	9½	9	9	8½	6½	6½	6½
Bury	10½	10½	10	9	9½	10	9	6	7	7
Cambridge	9½	9	9	9½	9½	9½	7½	6	6	6
Canterbury	8½	8	8	10	—	8½–9	7	5	5	5
Cardiff	10	10	10	10	10	10	9	7	7	7
Chatham	8	9	9	9	9	9	7½	6	6	6
Chelmsford	8	7½	8½	9	—	7½	6½	5	5	6½
Cheltenham	8½	8½	8½	8½	—	8½	8½	6	6	6
Chester	9½	10	9½	9½	9½	9½	8½	5½	6½	6½
Chesterfield	9	9	9	8	9	8½	8½	5½	5½	5½
Colchester	8	8½	8½	9	8	9	6	5½	5½	5½
Coventry	10½	10½	10½	10½	9½	10½	9½	7½	7½	7½
Crewe	7½	8	7½	9	8½	8	7½	5½	5½	6
Darlington	9½	9½	9½	10	10	9	8½	6½	6½	6½
Derby	9½	9½	9	9	9	9	8	6½	6½	7
Doncaster	9½	9½	9	9	9	9	8	6½	6½	7
Dudley	8½	8½	9	8½	8½	8	7½	5½	5½	6
Durham	9	9	9½	9	10	9	8½	6	6	6½
East Glamorgan and Monmouthshire Valleys	9½	9½	9½	9½	—	—	8½	6½	6½	6½
Exeter	8	8½	8	8½	7½	7½	7	5½	5½	5½
Folkestone	8½	8½	8½	9	8½	8½	7–7½	6½	6½	6½
Gloucester	8	8½	8½	8	8	8½	8	5½	5½	5½
Grantham	8	8	7½	7½–8	7½–8	7	6½	5	5	5
Grays	—	10	10	—	—	9½	8½	7	7	7
Grimsby	9	9	9	9½	9	8	8½	7	7	7
Great Yarmouth ..	8	8	8	—	8	8	6½	5	5	—
Halifax	10	10	9	8½	8½	9	8½	7	7	7
Harrogate	9½	9½	9	9	8	9	8½	6½	6½	6½
Hartlepools	9	10	9½	10	10	10	9	7	7	7½
Hastings	8½	8	8	8½	8	8	7	6½	5½	6½
Hereford	8	8	7½	8½	8	7	7	5½	5½	5½
Huddersfield	10	9½	9½	9½	10	9	8½	7	7	7
Hull	10½	10	10	10	10	10	8½	7½	7½	7½
Ipswich	8½	8½	8½	9	9	8½	7	5½	5½	5½
Lancaster	10	10	9	9	9	9	8	6	6	6½
Leamington Spa ..	9	9	9	8½	9	9	8	6	6	6
Leeds	10	10	10	10	10	10	8½	7½	7½	7½
Leicester	9½	9½	10	10½	10	9½	9	7	7	7½
Lincoln	9	8½	8½	9	8½	8½	8	6	5½	6½
Liverpool	11	11	11	11	10½	11	9½	7	7	7
Llanelly	9½	9½	9½	8½	9	8½	8	5½	5½	5½
London	11½	11½	11½	11½	—	1s.	9	8	8	8
Loughborough ..	9	8½	8½	9	9	8½	7½	5½	5½	6½
Luton	9½	8½	8½	8½	9	8½	7½	6	6	6
Maidstone	9	9	9	9	9	9	8	6	6	6
Manchester	10	10½	10½	11	10	10	9½	6½	6½	7½
Mansfield	8½	9	8½	8½	—	8½	8	6	6	—
Merthyr Tydfil ..	9½	9½	9½	9½	8½	9	8	6½	6½	6½
Middlesbrough ..	9	10	9½	10	10	10	8½	7	7	7½
Newcastle-on-Tyne.	10½	10½	10½	10½	10	10	9½	7½	7½	7½
Newport, Mon.	10	10	10	10	8½	10	9	7	7	7
Northampton	9	9	9	9	8½	9	8	6	6	6
Norwich	8½	8½	8½	8½	8	8½	7½	6	6	6
Nottingham	10	10	10	10½	9½	10	9	7½	7½	8
Oldham	10½	10½	10½	10	9	10	9½	7	7	7½
Oxford	9½	9	9	9	8	9	8	6½	6½	6½
Plymouth	9	9	9	9	9	9	8	6½	6½	6½
Pontypridd	9½	9	9	9½	9	9	8	6½	6½	6½
Portsmouth	9½	9½	9½	9½	—	8½	7½	7	7	7
Preston	10½	10½	10	9½	9½	10	9½	6	6½	6½
Reading	8½	9	9	9½	—	9	7½	6	6	6
Rochdale	10½	10½	10	10	8½	9½	9	7	7	7½
Rochester	8	9	9	9	9	8½	7½	6	6	6
Rugby	9½	9½	9½	9½	8	9½	8½	6	6	6
St. Albans	9	9	9	9–10	9	9–10	8	6½	6	6½
St. Helens	9	9½	10	9½	9½	9½	9½	6	6½	6
Scarborough	9	9½	9	8½	8	9	8	7	7	7
Sheffield	10½	9½	9½	9½	9½	10	8½	6½	6½	6½
Shrewsbury	8½	8½	8½	9½	—	8½	7	5½	5½	5½
Southampton	8½	9½	9½	8½	—	9½	8½	6½	6½	6½
Southend-on-Sea ..	9	9	9	9	P'cework	9	7	6	6	7
Southport	10	10	9½	9½	9½	9½	9½	6½	7	7½
South Shields	10½	10½	10½	10½	10	8½	9½	7½	7½	7½
Stockport	10½	10	10	10½	9½	10	9½	6	6½–7	7½
Stockton-on-Tees .	9	10	9½	10	10	10	9	7	7	7½
Stoke-on-Trent ..	9	9½	9	9	—	8½	8½	6	6	—
Stroud	7½	7½	7½	7½	7½	7½	7	5	5	5
Sunderland	10	10½	10	10	10	9	9½	6½	6½	7
Swansea	9½	9½	9½	9½	8½	9	9	6½	6½	6½
Taunton	7	7	7	7	—	6	6½	4½	4½	4½
Torquay	8	8	8	8	8	8	8	6	6	6
Wakefield	9½	9½	9	9½	8½	9	8	7	7	7
Walsall	9½	9	9	9	8½	9	8	6½	6½	6½
Warrington	8½	9½	9½	10	8½	9½	8½	5½–6	6	6–6½
West Bromwich ..	10	10	10	10½	—	9	8	7	7	7
Wigan	10	10½	9½	9½	9	9½	9½	7	7	7
Windsor	9	9	9	10	—	9	—	6	6	6½
Wolverhampton ..	9½	9½	9½	10	8	10	8	6½	6½	6½
Worcester	8½	9	9	9	9	9	7½	6	6	6
York	9½	9½	9	9½	9½	9	8½	7	7	7

The mason's rate given is for bankers; fixers usually ½d. per hour extra.

List of Competitions, Contracts, etc.

For some contracts still open, but not included in this List, see previous issues. **Those with an asterisk (*) are advertised in this number:** Competitions, iv.; Contracts, iv., vi., viii.; Public Appointments, —; Auction Sales, xviii. Certain conditions beyond those given in the following information are imposed in some cases, such as: the advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in.

*** It must be understood that the following paragraphs are printed as news, and not as advertisements; and that while every endeavour is made to ensure accuracy, we cannot be responsible for errors that *may* occur.

Competition.

* NOVEMBER 30.—**York.**—TOWN PLANNING.—The Town Planning Committee of the York Corporation invite competitive schemes under the Housing and Town Planning, etc., Act, 1909, in connection with certain areas within and without the city.

Contracts.

BUILDING AND PAINTING.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in.

AUGUST 30.—**Nottingham.**—WARDS.—Erection of open-air wards at City Isolation Hospital, Bagthorpe. Quantities of Mr. A. Dale, City Architect, Guildhall, Nottingham. Deposit, £2 2s.

AUGUST 30.—**Warrington.**—PAINTING.—Painting of Howley Footbridge over the river Mersey. Specifications of the Borough Surveyor, Town Hall.

AUGUST 31.—**Cardiff.**—FACTORY.—Erection of new segar factory for Messrs. Freeman & Son, Ltd., Grangetown, Cardiff. Quantities of Mr. Lennox Robertson, architect, 27, Windsor-place, Cardiff. Deposit, £1 1s.

AUGUST 31.—**Chertsey.**—FOOTBRIDGE.—Construction of a new footbridge over the river Bourne, for the Chertsey R.D.C. Quantities of Mr. C. G. Atkinson, Engineer, Surveyor's Office, Station-road, West Byfleet. Deposit, 10s.

AUGUST 31.—**Kendal.**—PAINTING, ETC.—For repainting the whole of the exterior of Aynam Mills, offices, and outbuildings for Mr. George M. McKay. Mr. Stephen Shaw, architect, Kendal.

AUGUST 31.—**Rhymney.**—SURGERY, ETC.—Erection of a surgery and garage for the Committee of the Rhymney Workmen's Doctor's Fund. Specification of Mr. W. R. Jackson, Tre York, Rhymney.

SEPTEMBER 1.—**Southampton.**—QUAY REPAIRS.—Repairs to a portion of the Town Quay, south-east corner, for the Southampton Harbour Board. Specification of Mr. E. Cooper Poole, Engineer to the Board, Town Quay, Southampton. Deposit, 10s.

SEPTEMBER 3.—**Huddersfield.**—ALTERATIONS.—For the various works required in the alterations and additions to the "Electrician's Hotel," Longroyd Bridge, Huddersfield. Quantities of Messrs. J. B. Abbey & Son, architects, District Bank Chambers, Market-street, Huddersfield.

SEPTEMBER 4.—**Derbyshire.**—ADDITIONS.—The North Derbyshire Hospital Committee invite tenders for the erection of additions to the administrative blocks at each of their district hospitals, viz., Morton, Langwith, Mastin Moor, and Dronfield. Quantities of Mr. T. S. Wilcockson, architect, Knifesmith-gate, Chesterfield. Deposit, £1 1s.

SEPTEMBER 4.—**Glasgow.**—BRIDGES.—Excavating, concrete, piling, and mason work required in the construction of two bridges widening the existing bridges over the Caledonian and North British Railways at Pinkston-road, Glasgow, for the Glasgow Corporation. Specifications of Mr. J. R. Sutherland, Engineer, Water Department, 45, John-street, Glasgow.

SEPTEMBER 4.—**Glasgow.**—BRIDGE WIDENING.—Excavating, concrete, and mason work required in the construction of two bridges widening the existing bridges over the Caledonian and North British Railways at Balmore-road, Glasgow, for the Corporation. Specifications of Mr. J. R. Sutherland, Engineer, Water Department, 45, John-street, Glasgow.

SEPTEMBER 8.—**Dundee.**—EXTENSION.—The Commissioners of H.M. Works and Public Buildings invite tenders for the extension of Dundee Post Office. Specificaton of the Postmaster, Dundee. Quantities at H.M. Office of Works, 3, Parliament-square, Edinburgh. Deposit, £1 1s.

* SEPTEMBER 16.—**Birmingham.**—ENLARGEMENT OF TELEPHONE EXCHANGE.—The Commissioners of H.M. Works, etc., invite tenders for the enlargement of a telephone exchange.

* SEPTEMBER 17.—**North London.**—REPAIRS, ETC.—The Commissioners of H.M. Works, etc., invite tenders for execution of ordinary works and repairs to buildings.

* NO DATE.—**Harold Wood.**—POINTING, ETC.—The Brentwood Asylum Committee invite tenders for re-pointing, etc.

FURNITURE, MATERIALS, etc.

AUGUST 30.—**Bradford.**—MATERIALS.—Supply to the Gas Committee of the Corporation of materials, including pipes and castings, tubing, shovels, oils, lime, glass, etc. Forms of tender of Mr. C. Wood, Gas Engineer, Town Hall, Bradford.

AUGUST 30.—**London.**—PACKINGS, ETC.—Supply to the Commissioners of His Majesty's Works, etc., of packings and jointings. Forms of tender of the Controller of Supplies, H.M. Office of Works, 18, Queen Anne's-gate, London, S.W.

AUGUST 31.—**London.**—SASH LINE, ETC.—Supply to the Commissioners of His Majesty's Works, etc., of sash line, blind cord, etc., during a period of one year from September 1, 1915. Forms of tender of the Controller of Supplies, H.M. Office of Works, 18, Queen Anne's-gate, Westminster, S.W.

SEPTEMBER 1.—**London.**—WOOD SCREWS.—Supply to the Commissioners of His Majesty's Works, etc., of wood screws during a period of three months, from October 1, 1915. Forms of tender of the Controller of Supplies, H.M. Office of Works, 18, Queen Anne's-gate, Westminster, S.W.

SEPTEMBER 1.—**Manchester.**—MATERIALS.—Supply to the Cleansing Committee of the Manchester Corporation of 10 tons of piassava for brushmaking, fifteen standards spruce deans, six standards "Archangel" red deals, twenty-seven balks pitch pine. Particulars of Mr. Robert Williamson, Superintendent of the Cleansing Department, Town Hall, Manchester.

SEPTEMBER 1.—**Paddington.**—MATERIALS.—Supply to the B.G. of ironmongery, oils, paints, and colours, etc. Forms of tender of Mr. S. J. Langford, Guardians' Offices, 313, Harrow-road, W.

SEPTEMBER 2.—**Ramsbottom.**—MATERIALS.—Supply of sanitary, road, and other materials to the U.D.C. Forms of tender of Mr. T. H. Bell, Surveyor, Council Offices, Market-place, Ramsbottom.

SEPTEMBER 6.—**Bedford.**—ROAD MATERIALS.—Supply to the T.C. of granite, slag, and iron-stone macadam. Form of tender of Mr. N. Greenshields, Borough Surveyor, Town Hall, Bedford.

SEPTEMBER 9.—**Colchester.**—MATERIALS.—Supply to the Committee of Visitors of the Severalls Asylum, Colchester, of ironmongery and engineers' goods, iron, screws, gas and steam fittings, cement, paints, and oils. Forms of tenders of the Clerk of the Asylum, Severalls, Colchester.

SEPTEMBER 15.—**Melbourne.**—MANTLES.—Supply to the Victorian Railway Commissioners of 20,000 mantles of 700 c.p. for Lux lamps. Copy of specification at the Commercial Intelligence Branch of the Board of Trade, 73, Basinghall-street, E.C.

SEPTEMBER 23.—**Sydney.**—ELECTRIC LAMPS.—Supply of electric incandescent lamps to the Deputy Postmaster-General, Sydney, Australia. Copy of specifications at the Commercial Intelligence Branch of the Board of Trade, 73, Basinghall-street, E.C.

SEPTEMBER 29.—**Melbourne.**—FUSE BLOCKS, ETC.—Supply to the Victorian Railway Commissioners of 5000 fuse blocks, 5000 porcelain bases, and 10,000 spare fuse clips. Copy of specification at the Commercial Intelligence Branch of the Board of Trade, 73, Basinghall-street, E.C.

OCTOBER 13.—**Melbourne.**—OILS, ETC.—Supply to the Victorian Railway Commissioners of lubricating oils and grease for two years. Copy of specification at the Commercial Intelligence Branch of the Board of Trade, 73, Basinghall-street, E.C.

ENGINEERING, IRON, AND STEEL.

SEPTEMBER 2.—**Plymouth.**—CAST-IRON PIPES.—Supply to the Corporation of 4,400 tons of 33-in. cast-iron pipes and special castings. Specifications of Mr. F. Howarth, Water Engineer, Old Town Hall, Plymouth. Deposit, £3 3s.

SEPTEMBER 2.—**Plymouth.**—PIG LEAD.—Supply to the Corporation of 50 tons of pig lead. Specification of Mr. F. Howarth, Water Engineer, Old Town Hall, Plymouth.

SEPTEMBER 2.—**Plymouth.**—SLUICE VALVES.—Supply to the Corporation of 33-in., 25-in., and 9-in. sluice valves; also double air filters with oad surface boxes. Specification of Mr. F. Howarth, Water Engineer, Old Town Hall, Plymouth.

SEPTEMBER 8.—**Melbourne.**—SIGNALLING APPARATUS, ETC.—Supply to the Victorian Railway Commissioners of transformers and relays for point indication for automatic signalling; and electric point and lock detectors. Copy of specifications at the Commercial Intelligence Branch of the Board of Trade, 73, Basinghall-street, E.C.

SEPTEMBER 13.—**East Kilbride.**—HEATING, ETC.—Installation of (*a*) boilers and (*b*) heating and hot-water supply works at Hairmyres Colony, East Kilbride, for the District Committee. Schedules from the Consulting Engineer, Mr. William Arnot, 163, Hope-street, Glasgow. Deposit, £2 2s.

SEPTEMBER 14.—**Melbourne.**—SWITCHBOARD PARTS.—Supply of telephone switchboard parts for the Deputy Postmaster General, Melbourne. Copy of specification at the Commercial Intelligence Branch of the Board of Trade, 73, Basinghall-street, E.C.

SEPTEMBER 21.—**New Zealand.**—DREDGE BUCKETS.—Supply to the Timaru Harbour Board of twelve dredge buckets. Copy of specification at the Commercial Intelligence Branch of the Board of Trade, 73, Basinghall-street, E.C.

SEPTEMBER 23.—**Sydney.**—TELEGRAPH INSTRUMENTS.—Supply to the Deputy Postmaster-General, Sydney, Australia, of telegraph instruments. Copy of specification at the Commercial Intelligence Branch of the Board of Trade, 73, Basinghall-street, E.C.

SEPTEMBER 29.—**Melbourne.**—CONCRETE MIXER.—Supply to the Victorian Railway Commissioners of batch concrete mixer, including petrol motor. Copy of specification at the Commercial Intelligence Branch of the Board of Trade, 73, Basinghall-street, E.C.

SEPTEMBER 29.—**Melbourne.**—CUTTER, ETC.—Supply to the Victorian Railway Commissioners of a combined chain cutter and hollow chisel mortising and boring machine. Copy of specification at the Commercial Intelligence Branch of the Board of Trade, 73, Basinghall-street, E.C.

SEPTEMBER 30.—**Johannesburg.**—BOILERS, ETC.—Supply to the Johannesburg Municipal Council of two (or alternatively one) water-tube boilers, complete with superheaters, mechanical stokers, and draught plant. Copy of specification at the Commercial Intelligence Branch of the Board of Trade, 73, Basinghall-street, E.C.

OCTOBER 25.—**Sydney.**—CAPSTANS.—Supply to the Sydney Harbour Trust Commissioners of six electrically operated wharf capstans. Copy of specification at the Commercial Intelligence Branch of the Board of Trade, 73, Basinghall-street, E.C

OCTOBER 25.—**Sydney.**—PLANT, ETC.—Supply of power station plant and equipment for the Commonwealth Naval Dockyard, Cockatoo Island, Sydney, N.S.W. Copy of specification at the Commercial Intelligence Branch of the Board of Trade, 73, Basinghall-street, E.C.

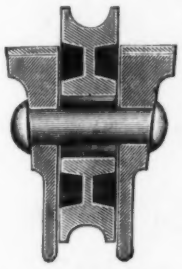
OCTOBER 27.—**Sydney.**—MACHINE TOOLS.—Supply of about 160 machine tools for the Commonwealth Naval Dockyard. Copy of specification at the Commercial Intelligence Branch of the Board of Trade, 73, Basinghall-street, E.C.

NO DATE.—**Ontario.**—WHARF EXTENSION.—Wharf extension works at the entrance of the Mission River, Fort William, Ontario. Copy of specification at the Commercial Intelligence Branch of the Board of Trade, 73, Basinghall-street, E.C.

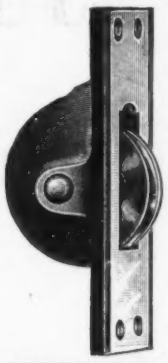
[Those with an asterisk (*) are advertised in this issue.]

The "KENRICK"
ANTI-FRICTION SASH PULLEY

The wheel in this Pulley revolves on Steel Rollers, thus reducing Friction to a minimum.



SECTION SHOWING STEEL ROLLERS.



SIDE ELEVATION.

Experiment has shown that this pulley will outlast twelve ordinary bushed pulleys.

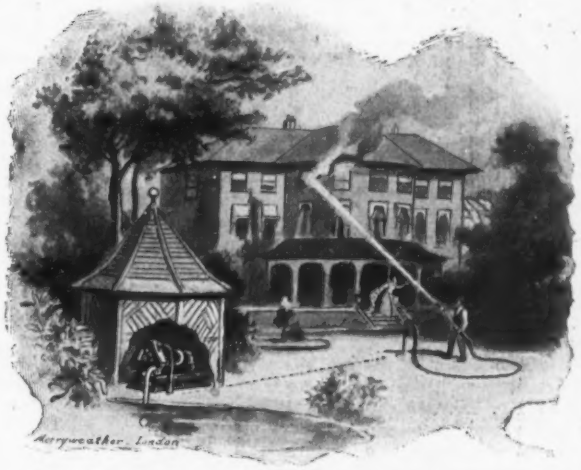
Price with Brass Face and Brass Wheel,
1¾ in., 8/- doz.; 2 in., 9/6 doz.; 2¼ in., 11/- doz.

ARCHIBALD KENRICK & SONS, Ltd.
WEST BROMWICH.

Manufacturers of Builders' Ironmongery, Brassfoundry, Locks, Latches, Door Hangers, Fanlight Gearing, etc., etc.

London Office and Showroom: **59, HOLBORN VIADUCT, E.C.**

Country House Fire Protection and Life Saving
THE GREAT SPECIALITY OF
MERRYWEATHER & SONS



PRACTICAL Inspectors sent to report on the Fire Appliances necessary for such buildings and to carry out the work complete, including formation of Household Fire Brigade and drilling staff in the use of apparatus.

CALL OR WRITE—

MERRYWEATHER & SONS, Ld.
63, LONG ACRE, LONDON, W.C.

The Largest Varnish Industry in the World.

TRADE MARK

"BRITANNIA"
VARNISHES, ENAMELS, & SPECIALTIES

Manufactured by

ROBT. INGHAM CLARK & Co. LTD.

Works: West Ham Abbey, Stratford, E.

LONDON

Offices: Caxton House, Westminster, S.W.

ROAD, SANITARY, AND WATER WORKS.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in.

AUGUST 30.—**Athlone.**—PLUMBING, ETC.—For plumbing and gas fitting at Athlone new courthouse, for the Westmeath C.C. Specification of Mr. A. E. Joyce, County Surevyor, Mullingar.

AUGUST 30.—**Dartford.**—ROADS.—(*a*) Supply to the R.D.C. of 4,770 tons of broken hard stone; (*b*) steam rolling. Forms of tender of Mr. J. Hockins, Surveyor, Gartly, Dartford.

AUGUST 30.—**Plymouth.**—SEWER.—Construction of a 9-in. sewer and the relaying of the house drains of No. 1 to 24 (inclusive), Lanhydrock-terrace. Quantities of Mr. James Paton, Borough Engineer, Municipal Offices, Plymouth.

AUGUST 30.—**Romford.**—ROADS.—For improving corner of Park-lane and Hornchurch-road, for the Romford R.D.C. Specification of Mr. W. J. Grant, Surveyor, 16A, South-street, Romford.

SEPTEMBER 1.—**Newburn.**—SEWER.—Supply and laying of about 150 yds. of 18-in. pipe sewer, 43 yds. of 24-in. pipe sewer, and 15 yds. of 12-in. pipe sewer, for the Newburn U.D.C. Quantities of the Engineer, Mr. Thomas Gregory, Council Offices, Newburn.

SEPTEMBER 2.—**Ottery St. Mary.**—RIVER WORK.—For repair and paving the river bed at Gosforth Bridge, near Ottery St. Mary, for the Devon C.C. Quantities of Mr. W. P. Robinson, County Surveyor, 22, Queen-street, Exeter.

SEPTEMBER 2.—**Plymouth.**—CARTAGE.—For the cartage of about 4,400 tons of cast-iron pipes, etc., and surplus excavation from pipe trench, in connection with Plymouth Corporation Waterworks. Specification of Mr. Frank Howarth, Water Engineer, Old Guildhall, Plymouth.

SEPTEMBER 7.—**Carshalton.**—ROADS.—(1) Supply of granite chippings, etc.; (2) hire of steam-roller and scarifier, for the U.D.C. Particulars of Mr. W. Willis Gale, Surveyor, District Council Offices, The Square, Carshalton.

SEPTEMBER 15.—**Fovant.**—SANITARY.—For the sanitary services, etc., at the Fovant Camps, for the period from October 1, 1915, to March 31, 1916. Forms of tender from the Officer Commanding, Army Service Corps, Fovant, Wilts.

Auction Sales.

* SEPTEMBER 1.—**Chiswick.**—Mr. H. Butcher will sell by auction, on the premises, the stock, fixtures, and plant of a general builder's agricultural and horticultural ironmonger.

* SEPTEMBER 7.—**Barnes Common.**—Messrs. Holmes & Co. will sell by auction, at the Mart, freehold building land.

[Those with an asterisk (*) are advertised in this issue.]

OBITUARY.

Mr. G. H. Hunt.

The death, on August 17, at "Avon View House," Evesham, is announced of Mr. George Henry Hunt, architect and surveyor, of Evesham and Raymond-buildings, Gray's Inn, W.C., aged sixty-four years. Mr. Hunt was elected a Fellow of the Royal Institute of British Architects in 1891; he formerly practised at No. 26, Bedford-row, W.C. He won the first premium with his designs for the new Municipal Buildings, Gloucester, in 1889; he was the architect also of the Drill Hall, Armoury, and Headquarters of the 1st Vol. Batt. of the Manchester Regiment, in Patricroft, near Manchester; workhouse and office buildings in Evesham and Hampton for the Evesham Board of Guardians; nurses' home, West London Hospital, Hammersmith (in conjunction with Mr. W. Harvey); extensive alterations and enlargement of Institute Buildings for the Evesham Corporation; premises in Bengeworth for the Evesham Unionist Club; enlargement, at a cost of more than £8,000, of the Public Hall and Library Buildings, Evesham; business premises at the corner of King William-street and Arthur-street West, E.C.; the School, at Broadway, Worcestershire, at a cost of £5,000 (Messrs. Hunt & Bacon, of Evesham), 1913; and of a house at Elstree, Herts, for Mr. S. S. Seal. Three years ago Mr. Hunt acted in collaboration with Mr. C. E. Bateman, Hon. Consulting Architect to the Governors, as assessor in the competition for the new buildings, to accommodate 180 boys and ninety girls, at Harborne, of the Birmingham Blue-Coat School.

Mr. S. E. J. Pritchard.

The death has just occurred of Mr. Stanley E. J. Pritchard, only son of Mr. Joseph Pritchard, architect, of Kidderminster. Deceased, who was thirty-four years of age, was a partner with his father in the firm of Pritchard & Pritchard, and was well known in Worcestershire.

Mr. T. J. Thompson.

The funeral took place at Peterborough Cemetery on Saturday last of Mr. Thomas John Thompson, of Peterborough, senior partner in the firm of Messrs. John Thompson & Co., church builders and restorers, who died at the age of fifty-four years. Mr. Thompson was a member of the Town Council, and had been mayor of the city on four occasions, one of them being the year of Queen Victoria's Diamond Jubilee. Many noteworthy contracts have been carried through by Mr. Thompson's firm, and one in which he had a personal share was the restoration and enlargement of Sandringham House after the fire. He was also directly concerned in restoring St. Paul's, Peterborough, Winchester, and Chester Cathedrals. Messrs. Thompson have done much work in the Eastern Midlands, and at the outbreak of war were engaged in church restoration in Belgium.—*Eastern Daily Press.*

PATENTS.

APPLICATIONS PUBLISHED.*

1,438 of 1914.—Alpine Maschinenfabrik Gesellschaft Vorm. Holzhäuersche Maschinenfabrik Gesellschaft and Fred M. Meyer: Manufacture of cementitious material.

17,674 of 1914.—Felix Edward Sears: Door bolts.

* All these applications are in the stage in which opposition to the grant of Patents upon them can be made.

PRICES CURRENT OF MATERIALS.

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.]

***** Our aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.**

BRICKS, &c.

Per 1000 Alongside, in River Thames.	£	s.	d.
Best Stocks	2	0	0
Picked Stocks for Facings	2	15	0

Per 1000, Delivered at Railway Depôt, London.	£	s.	d.		£	s.	d.
Flettons	1	16	0	Best Blue Pressed Staffordshire	3	15	0
Best Fareham Red	3	12	0	Do. Bullnose	4	0	0
Best Red Pressed Ruabon Facing	5	0	0	Best Stourbridge Fire Bricks	4	0	0
GLAZED BRICKS—							
Best White, Ivory, and Salt Glazed Stretchers	13	0	0	D'ble Str'tch'rs	18	10	0
Headers	12	10	0	Double Headers	15	10	0
Quoins, Bullnose and 4½ in. Flats	16	10	0	One Side and two Ends	19	10	0
				Two Sides and one End	20	10	0
				Splays and Squints	18	0	0

Second Quality £1 10s. per 1000 less than best.

	s.	d.
Thames and Pit Sand	7	9 per yard, delivered.
Thames Ballast	6	6 " " "

Per ton, delivered.	£	s.	d.		£	s.	d.
Best Portland Cement	2	4	0	..	2	8	0
Best Ground Blue Lias Lime	1	1	0	..	—		

NOTE.—The cement or lime is exclusive of the ordinary charge for sacks.

Grey Stone Lime	15s. 6d. per yard delivered.
Stourbridge Fireclay in s'cks	35s. 0d. per ton at rly. dpt.

STONE.

Per Ft. Cube.

	s.	d.
BATH STONE—delivered on road waggons, Paddington Depôt	1	7
Do. do. delivered on road waggons, Nine Elms Depôt	1	8½
PORTLAND STONE (20 ft. average)—		
Brown Whitbed, delivered on road waggons, Paddington Depôt, Nine Elms Depôt, or Pimlico Wharf	2	5½
White Basebed, delivered on road waggons, Paddington Depôt, Nine Elms Depôt, or Pimlico Wharf	2	7½

Per Ft. Cube, delivered at Railway Depôt.

	s.	d.		s.	d.
Ancaster in blocks	1	11	Closeburn Red Freestone	2	2
Beer in blocks	1	7	Red Mansfield Freestone	2	6
Greenshill in blocks	2	0	Talacre & Gwespyr Stone	2	6
Darley Dale in blocks	2	6			
Red Corsehill in blocks	2	6			

YORK STONE—*Robin Hood Quality.*

Per Ft. Cube, Delivered at Railway Depôt.	s.	d.
Scappled random blocks	2	10

Per Ft. Super., Delivered at Railway Depôt.

6 in. sawn two sides landings to sizes (under 40 ft. super.)	2	8
6 in. rubbed two sides ditto, ditto	2	6
3 in. sawn two sides slabs (random sizes)	0	11½
2 in. to 2½ in. sawn one side slabs (random sizes)	0	7
1½ in. to 2 in. ditto, ditto	0	6

HARD YORK—

Per Ft. Cube, Delivered at Railway Depôt.

Scappled random blocks	3	0

Per Ft. Super., Delivered at Railway Depôt.

6 in. sawn two sides landing to sizes (under 40 ft. super.)	2	8
6 in. rubbed two sides ditto	3	0
2 in. sawn two sides slabs (random sizes)	1	2
8 in. self-faced random flags	0	5

TILES.

	Per 1000 f.o.r. London. £	s.	d.
Best machine-made tiles or hand-made sand-faced tiles from either Broseley or Staffordshire district	2	12	6
Ornamental ditto	2	15	0
Hip and valley tiles (per dozen)	0	5	6

SLATES.

	Per 1000 of 1200 f.o.r. London. £	s.	d.
Best Blue Bangor slates, 20 by 10	11	5	0
First quality " "	11	0	0
" " 16 by 8	5	10	0
Best Blue Portmadoc, 20 by 10	11	2	6
First quality " "	10	12	6
" " 16 by 8	5	10	0

WOOD.

BUILDING WOOD.	At per standard. £	s.	d.		£	s.	d.
Deals: best 3 in. by 11 in. and 4 in. by 9 in. and 11 in.	21	10	0	..	22	0	0
Deals: best 3 in. by 9 in.	21	0	0	..	22	0	0
2 in. by 11 in.	23	0	0	..	23	10	0
Battens: best 2½ in. by 7 in. and 8 in., and 3 in. by 7 in. and 8 in.	19	10	0	..	20	10	0
Battens: best 2½ in. by 6 in. and 3 in. by 6 in.	0	10	0	less than 7 in. and 8 in.			
2 in. by 7 in.	20	0	0	..	—		
3 in. by 4 in.	21	0	0	..	—		
2 in. by 4½ in.	22	10	0	..	—		
3 in. by 4½ in.	21	10	0	..	—		
Deals: seconds	1	0	0	less than best			
Battens: seconds	0	10	0	" " "			
2 in. by 4in. and 2 in. by 6 in.	18	10	0	..	19	10	0
2 in. by 4½ in. and 2 in. by 5 in.	16	10	0	..	17	0	0
Foreign Sawn Boards—							
1 in. and 1¼ in. by 7 in.	0	10	0	more than battens.			
¾ in.	1	0	0	"			
Fir timber: best middling	At per load of 50 ft.						
Memel (average specification)	6	15	0	..	7	15	0
Seconds	6	0	0	..	6	10	0
Small timber (8 in. to 10 in.)	5	5	0	..	5	10	0
Small timber (6 in. to 8 in.)	4	10	0	..	5	0	6
Swedish balks	4	0	0	..	4	10	0
Pitch-pine timber (30 ft. average)	8	5	0	..	9	0	0

JOINERS' WOOD.	At per standard. £	s.	d.		£	s.	d.
White Sea: first yellow deals, 3 in. by 11 in.	33	15	0	..	35	0	0
Battens, 2½ in. and 3 in. by 7 in.	23	7	6	..	24	7	6
Second yellow deals, 3 in. by 11 in.	27	5	0	..	28	5	0
Do. 3 in. by 9 in.	25	5	0	..	26	5	0
Battens, 2½ in. and 3 in. by 7 in.	20	0	0	..	21	0	0
Third yellow deals, 3 in. by 11 in. and 9 in.	20	2	6	..	21	2	6
Battens, 2½ in. and 3 in. by 7 in.	19	0	0	..	20	0	0
Petrograd: first yellow deals, 3 in. by 11 in.	29	10	0	..	31	0	0
Do. 3 in. by 9 in.	25	5	0	..	26	5	0
Battens	19	5	0	..	20	5	0
Second yellow deals, 3 in. by 11 in.	21	10	0	..	23	0	0
Do. 3 in. by 9 in.	20	15	0	..	21	10	0
Battens	19	10	0	..	20	0	0
Third yellow deals, 3 in. by 11 in. / Do. 3 in. by 9 in.	19	10	0	..	—		
Battens	19	0	0	..	19	10	0
White Sea and Petrograd—							
First white deals, 3 in. by 11 in.	22	10	0	..	24	0	0
First white deals, 3 in. by 9 in.	21	0	0	..	22	10	0
Battens	18	10	0	..	19	0	0
Second white deals, 3 in. by 11 in.	20	0	0	..	21	0	0
Second white deals, 3 in. by 9 in.	19	0	0	..	20	0	0
Battens	18	0	0	..	18	10	0
Pitch-pine deals	34	0	0	..	35	0	0
Under 2 in. thick extra	0	10	0	..	1	0	0
Columbian or Oregon Pine, best quality	28	0	0	..	29	0	0
Yellow Pine—First, regular sizes	57	0	0	upwards.			
Oddments	39	0	0	"			
Seconds, regular sizes	43	10	0	"			
Oddments	37	0	0	"			
Kauri Pine—Planks per ft. cube	0	7	6	..	—		
Oak Logs—							
Large, per ft. cube	0	5	6	..	0	6	6
Small " "	0	4	6	..	0	5	5
Wainscot Oak Logs, per ft. cube	0	10	6	..	0	12	6

WOOD (*Continued*).

JOINERS' WOOD (*Continued*)—	£	s.	d.		£	s.	d.
Dry Wainscot Oak, per ft. super, as inch	0	1	0	..	0	1	3
½ in. do. do.	0	0	10	..	0	1	0
Dry Mahogany—Honduras, Tabasco, per ft. super, as inch	0	1	0	..	0	1	4
Selected, Figury, per ft. super, as inch	0	1	6	..	0	2	6
Cuba Mahogany	0	1	6	..	0	2	6
Dry Walnut, American, per ft. super, as inch	0	1	0	..	upwards. 0	1	3
French, "Italian," Walnut	0	1	0	..	0	1	6
Teak, per load (Rangoon or Moulmein)	28	0	0	..	34	0	0
Do. do. (Java)	24	0	0	..	27	0	0
American Whitewood planks, per ft. cube	0	6	6	..	0	7	6
Prepared flooring, etc.—			Per square.				
1 in. by 7 in. yellow, planed and shot	0	18	0	..	1	0	0
1 in. by 7 in. yellow, planed and matched	0	18	0	..	1	0	0
1¼ in. by 7 in. yellow, planed and matched	1	2	0	..	1	5	0
1 in. by 7 in. white, planed and shot	0	17	6	..	1	0	0
1 in. by 7 in. white, planed and matched	0	18	0	..	1	0	0
1¼ in. by 7 in. white, planed and matched	1	2	0	..	1	5	0
¾ in. by 7 in. yellow, matched and beaded, or V-jointed boards	0	14	6	..	0	16	6
1 in. by 7 in. " "	0	18	6	..	1	1	0
¾ in. by 7 in. white "	0	14	6	..	0	16	6
1 in. by 7 in. " "	0	18	6	..	1	1	0
6 in. at 6d. to 9d. per square less than 7 in.							

METALS.

JOISTS, GIRDERS, &c.

	In London or delivered Railway Vans, per ton. £	s.	d.		£	s.	d.
Rolled Steel Joists, ordinary sections	13	10	0	..	14	10	0
Compound Girders, ordinary Sections	16	0	0	..	17	0	0
Steel Compound Stanchions	16	10	0	..	17	10	0
Angles, Tees, and Channels, ordinary sections	15	0	0	..	15	10	0
Flitch Plates	15	0	0	..	15	10	0
Cast Iron Columns and Stanchions, including ordinary patterns	12	0	0	..	12	10	0
IRON—	Per ton, in London.						
Common Bars	13	10	0	..	—		
Staffordshire Crown Bars, good merchant quality	14	0	0	..	14	10	0
Staffordshire "Marked Bars"	14	10	0	..	15	0	0
Mild Steel Bars	14	0	0	..	14	10	0
Steel Bars, Ferro-Concrete quality, £15 basis price.							
Hoop Iron, basis price	15	0	0	..	—		
" " Galvanised	27	10	0	..	—		
(* And upwards, according to size and gauge.)							
Sheet Iron Black—							
Ordinary sizes to 20 g.	14	0	0	..	—		
" " 24 g.	15	0	0	..	—		
" " 26 g.	16	10	0	..	—		
Sheet Iron, Galvanised flat, ordinary quality—							
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	24	10	0	..	—		
Ordinary sizes to 22 g. and 24 g.	25	10	0	..	—		
Ordinary sizes to 26 g.	26	10	0	..	—		
Sheet Iron, Galvanised, flat, best quality—							
Ordinary sizes to 20 g.	26	10	0	..	—		
" " 22 g. and 24 g.	27	0	0	..	—		
Ordinary sizes to 26 g.	27	10	0	..	—		
Galvanised Corrugated Sheets—							
Ordinary sizes, 6 ft. to 8 ft. 20 g.	24	10	0	..	—		
Ordinary sizes, 22 g. and 24 g.	25	0	0	..	—		
Ordinary sizes, 26 g.	25	10	0	..	—		
Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker	16	10	0	..	—		
Best Soft Steel Sheets, 22 g. & 24 g.	17	0	0	..	—		
Best Soft Steel Sheets, 26 g.	18	10	0	..	—		
Cut Nails, 3 in. to 6 in.	15	0	0	..	15	10	0
(Under 3 in., usual trade extras.)							

LEAD, &c.

	Delivered in London. £	s.	d.		£	s.	d.
LEAD—Sheet, English, 4 lb. and up	28	0	0	..	—		
Pipe in coils	28	10	0	..	—		
Soil pipe	31	10	0	..	—		
Compo pipe	31	10	0	..	—		
NOTE—Country delivery 15s. per ton extra; lots under 5 cwt. 1s. per cwt. extra.							
COPPER—							
Strong Sheet per lb.	0	1	5	..	—		
Thin "	0	1	6	..	—		
Copper nails "	0	1	5	..	—		
Copper wire "	0	1	5	..	—		
BRASS—							
Strong Sheet "	0	1	3	..	—		
Thin "	0	1	4	..	—		
TIN—English Ingots "	0	1	7	..	—		
SOLDER—Plumbers' "	0	0	8	..	—		
Tinmen's "	0	0	11	..	—		
Blowpipe "	0	1	1	..	—		

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES AND IN SQUARES IN ORDINARY SIZES.

Per Ft.

21 oz. thirds	5½d.	32 oz. thirds	8½d.
" fourths	5d.	" fourths	7d.
26 oz. thirds	6½d.	Fluted Sheet, 15 oz.	5½d.
" fourths	5½d.	" 21 oz.	6½d.

ENGLISH ROLLED PLATE IN CRATES OF STOCK SIZES.

Per Ft.

¼ Rolled plate	3½d.
⅜ Rough rolled and rough cast plate	3½d.
½ Rough rolled and rough cast plate	4d.
Figured Rolled, Oxford Rolled, Oceanic, Arctic, Muffled, and Rolled Cathedral, white	4½d.
Ditto, tinted	6d.
Rolled Sheet	3½d.

OILS, &c.

		£	s.	d.
Raw Linseed Oil in pipes per gallon		0	2	3
" " " in barrels	"	0	2	4
" " " in drums	"	0	2	7
Boiled " " in barrels	"	0	2	6
" " " in drums	"	0	2	10
Turpentine in barrels	"	0	2	11
" in drums	"	0	3	2
Genuine Ground English White Lead, per ton (In not less than 5 cwt. casks.)		38	10	0
Red Lead, Dry per ton		40	0	0
Best Linseed Oil Putty per cwt.		0	10	0
Stockholm Tar per barrel		1	12	0
GENUINE WHITE LEAD PAINT—				
Blackfriars, Nine Elms, or Park, etc., brands (in 14 lb. tins), not less than 5 cwt. lots per ton delivered		36	15	0

VARNISHES, &c.

	Per gallon. £	s.	d.
Fine Pale Oak Varnish	0	8	0
Pale Copal Oak	0	10	6
Superfine Pale Elastic Oak	0	12	6
Fine Extra Hard Church Oak	0	10	0
Superfine Hard-drying Oak, for seats of Churches	0	14	6
Fine Elastic Carriage	0	12	9
Superfine Pale Elastic Carriage	0	16	0
Fine Pale Maple	0	10	0
Finest Pale Durable Copal	0	18	6
Extra Pale French Oil	1	1	0
Eggshell Flatting Varnish	0	18	0
White Pale Enamel	1	4	0
Extra Pale Paper	0	12	0
Best Japan Gold Size	0	10	0
Best Black Japan	0	16	0
Oak and Mahogany Stain	0	9	0
Brunswick Black	0	8	0
Berlin Black	0	16	0
Knotting	0	10	0
French and Brush Polish	0	10	6

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.]

TO CORRESPONDENTS.

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N.B.—Illustrations of the First Premiated Design in any important architectural competition will always be accepted for publication by the Editor, whether they have been formally asked for or not.

TENDERS.

Communications for insertion under this heading should be addressed to "The Editor," and must reach us *not later than* 2 *p.m. on Wednesday.* [N.B.—We cannot publish Tenders unless authenticated either by the architect or the building owner; and we cannot publish announcements of Tenders accepted unless the amount of the Tender is stated.]

* Denotes *accepted.* † Denotes *provisionally accepted.*

ADWICK-LE-STREET (Doncaster).—For certain works of sewerage and surface-water drainage, for the Urban District Council. Mr. G. Gledhill, Surveyor, Council Offices, Adwick-le-Street :—

H. Drake & Co.	£1,130 2 9
A. Storey	987 14 3
E. Rothera	977 14 4
Mullins & Co.	933 0 0
F. Haslam	930 18 3
A. Graham & Sons	853 4 3
H. C. Pullar & Co.	703 0 0
E. S. Knight, Springwell-lane, Balby, Doncaster, Fadmoor, and Gillamoor*	698 11 4

ARMAGH.—For the carrying out of certain repairs and painting work at the Workhouse, for the Guardians. Mr. H. C. Parkinson, architect :—

P. M. Kenna & Sons	£57 10 0	O'Hare & Mallon	£46 10 0
T. Collen	56 5 6	C. Matson, Armagh*	41 7 6

ASHFORD.—For summer repairs at the County School for Girls, Ashford, for the Kent Education Committee. Mr. Wilfrid H. Robinson, M.S.A., Architect, Sessions House, Maidstone :—

E. J. Bowles	£39 10	D. Godden & Son†	£36 0
W. Shippam	37 8	R. W. Erridge	24 5

BECKENHAM.—For summer repairs at the Beckenham School of Art and Secondary School, for the Kent Education Committee. Mr. Wilfrid H. Robinson, M.S.A., Architect, Sessions House, Maidstone :—

T. Graham & Co.	£47 0	H. Heathfield	£34 10
E. Peddle	45 0	Jones & Andrews	34 0
F. W. Honour	37 10	J. Elliman, Beckenham‡	33 0
Syme & Duncan	35 0		

[‡ Accepted and reduced.]

BEDFORD.—For works of tar-painting and repairing to the playgrounds of certain Council schools, for the Bedfordshire County Council Education Committee. Mr. R. K. Ellison, Surveyor of School Buildings, Shire Hall, Bedford :—

TAR-PAINTING TO PLAYGROUNDS.

J. Smart & Son, 53, Victoria-street, Westminster, S.W.*	£199 2 3

RENOVATION WORKS.

Aspley Guise.	
C. Sinfield & Sons, Aspley Guise*	24 0 0
Biggleswade.	
S. Fennemore, Potton*	28 10 0
Bolnhurst.	
H. Mayes, Eaton Socon*	6 10 0
Cople.	
J. Keech, Cardington*	11 7 6
Eggington.	
H. Edwards & Son, Eggington*	15 15 0
Everton.	
F. Dennis, Potton*	7 7 6
Harlington.	
T. Briden, Toddington*	11 10 0
Husborne Cranley.	
A. W. Harris, Eversholt*	23 5 8
Lidlington.	
R. Walker, Wootton*	32 0 0
Marston Moretaine.	
S. Foster, Kempston*	24 0 0
Souldrop.	
W. Barcock & Son, Sharnbrook*	15 11 9
Stanbridge.	
W. Clarke, Stanbridge*	25 8 0
Sundon.	
H. W. Cowell, Luton*	27 10 0
Toddington.	
G. H. Allen & Sons, Toddington*	22 12 0
Wootton Infants'.	
R. Walker, Wootton*	3 17 6

BEXLEY WELLING.—For the execution of summer repairs to be carried out at the Bexley Welling Council School, for the Kent Education Committee. Mr. W. H. Robinson, M.S.A., Architect to the Committee, Sessions House, Maidstone :—

H. E. Chandler	£434 9 2
S. Smith	420 0 0
J. W. Ellingham	372 10 0
W. & A. Smith	370 15 0
H. Friday & Sons	355 0 0
J. J. Woollaston	340 0 0
W. Mills & Son, Ltd.	354 0 0
E. E. Beaven	305 0 0
J. Scott Fenn	286 18 0
A. A. White‡	214 0 0

[‡ Accepted, but reduced.]

BRANDON.—Accepted for the supply of granite for the Hopton sub-district, for the Rural District Council :—

Groby Granite Company, Barnham Station, 13s. 9d. per ton; Thetford Station, 13s. 3d.; Gas Hartshill Granite Company, Barnham, 13s. 1d.; Thetford Bridge, 12s. 10d.; Thetford Town Station, 12s. 10d.

BRIDGEND.—For alterations and additions to the Old Tabernacle Chapel, Elder-street, Bridgend. Mr. P. J. Thomas, architect :—

P. Gaylard	£1,148	W. Howell	£1,040
E. I. Davies	1,100	R. Jones, jun., Coychurch*	1,030
W. E. Jones	1,050		

DARTFORD.—For summer repairs at the Dartford County School for Girls, for the Kent Education Committee. Mr. Wilfrid H. Robinson, M.S.A., Architect, Sessions House, Maidstone :—

Treasure Bros.	£54 0
H. Friday & Sons†	49 15

DARTFORD.—For summer repairs at Dartford Technical Institute, for the Kent Education Committee. Mr. Wilfrid H. Robinson, M.S.A., Architect, Sessions House, Maidstone :—

W. F. Blay, Ltd.	£129 10	W. Bayliss	£107 14
O. M. Keevil	125 0	H. Friday & Son†	106 0

DOVER.—For summer repairs at the County School for Boys, St. Hilda's, Dover, for the Kent Education Committee. Mr. Wilfrid H. Robinson, M.S.A., Architect, Sessions House, Maidstone :—

J. R. Barwick	£22 0 0
G. Lewis & Sons†	16 7 6

FARNINGHAM.—For redecorations and repairs at Farningham Council School, for the Kent Education Committee. Mr. Wilfrid H. Robinson, M.S.A., Architect, Sessions House, Maidstone :—

W. H. Simmonds	£150 0
A. J. Buckingham	97 10
F. J. Knight†	65 0

HEADCORN.—For summer repairs at the Headcorn Council School, for the Kent Education Committee. Mr. Wilfrid H. Robinson, M.S.A., Architect, Sessions House, Maidstone :—

D. Godden & Son	£98 0	J. Wood & Son	£96 0
W. Shippam	96 14	W. J. Wickings	94 0
		W. Cashford†	82 10

KANTURK.—For (1) connecting labourers' cottages at Blue Pool, Lower and Upper, with main sewers; and (2) improving water supplies at Duinch and Tullyleese, for the Kanturk Rural District Council :—

	Per perch.
(1) J. J. Thornton, Kanturk	£1 7 6
(2) J. Browne, Crinnaloo, Banteer	1 0 0

NORTHFLEET.—For the execution of summer repairs at the Northfleet Lawn Council School, for the Kent Education Committee. Mr. W. H. Robinson, M.S.A., Architect to the Committee, Sessions House, Maidstone :—

Milton Bros.	£243 10	J. B. Lingham†	£227 10
Archer & Son	239 0		

PONTYPRIDD.—For sundry works to be done to the premises of the Pontypridd and District Club, Pontypridd, for the Committee. Messrs. W. Morgan Lewis & Walters, architects and surveyors, Pontypridd :—

Builder's Work.

R. Jones	£198 0 0	Williams & James	£151 0 0
D. Jones	191 0 0		
W. H. Davies & Co.	187 15 3	A. W. Julian, Pontypridd*	149 17 0
W. H. Evans	159 0 0		

Painter's and Decorator's Work.

W. H. Evans	£85 0 0	W. Ferris	£59 17 6
J. Jenkins	78 16 4½	White, Bryant, & Sons	58 12 0
Thomas & Co.	75 0 0	E. Jones, Pontypridd*	44 5 0
J. Cording	72 0 0		
D. Jones	65 0 0		

RAINHAM.—For redecorations and repairs at the Rainham Council School, for the Kent Education Committee. Mr. Wilfrid H. Robinson, M.S.A., Architect, Sessions House, Maidstone :—

J. J. Woollaston	£203 0 0
Kemp Bros.	197 12 6
H. R. Richardson	185 0 0
Swain & Stanley‡	187 13 6

[‡ Accepted and reduced.]

RAMSGATE.—For summer repairs at the Ramsgate County School, for the Kent Education Committee. Mr. Wilfrid H. Robinson, M.S.A., Architect, Sessions House, Maidstone :—

Grummant Bros.	£63 8	E. R. Dunn†	£54 10
W. J. Ballard	61 0		

RIPPLE (Dover).—For the execution of summer repairs at the Ripple Council School, for the Kent Education Committee. Mr. W. H. Robinson, M.S.A., Architect to the Committee, Sessions House, Maidstone :—

F. A. Collyer	£37 16 6	C. C. Townsend‡	£30 18 0

[‡ Accepted but reduced.]

ROCHESTER.—For summer repairs at the Rochester Technical Institute, for the Kent Education Committee. Mr. W. H. Robinson, M.S.A., Architect to the Committee, Sessions House, Maidstone :—

G. Baker & Son	£57 0	C. E. Skinner & Son	£52 10
Austin & Son	56 9		
Cossey & Co.	53 0		

[The Committee have decided to defer the work on the grounds of national economy.]

SELLINDGE and DOVER.—For summer repairs at Sellindge Council School, and the County School for Girls, Dover, for the Kent Education Committee. Mr. W. H. Robinson, M.S.A., Architect to the Committee, Sessions House, Maidstone :—

G. Lewis & Son	£227 15 0
J. R. Barwick‡	122 17 6

[‡ Accepted and reduced.]

SOUTHBOROUGH.—For redecorations and repairs at the Southborough Star Rooms Special Subjects Centre, for the Kent Education Committee. Mr. Wilfrid H. Robinson, M.S.A., Architect, Sessions House, Maidstone :—

P. H. Pankhurst	£115 5	T. Peter	£87 10
Treasure Bros.	112 10	Parks & Kemp‡	81 16

[‡ No tender has been accepted, as the work has been deferred.]

WILMINGTON.—For new playshed at the Wilmington Council School, for the Kent Education Committee. Mr. W. H. Robinson, M.S.A., Architect, Sessions House, Maidstone :—

W. F. Blay, Ltd.	£130 12 6	R. Tonge	£96 10 0
F. Ling & Son	119 16 6	W. Bayliss	96 2 0
Treasure Bros.	99 16 0	H. Friday & Son†	96 0 0

WOKING.—For construction of a new bridge over the Basingstoke Canal, for the Urban District Council. Mr. G. J. Wooldridge, Engineer and Surveyor, Council Offices, Woking. Quantities by Engineer :—

Howard Lacy, Ltd.	£2,391 13 3
H. Farrow	2,172 1 6
A. H. Ball & Co.	2,144 4 0
A. Hardy & Co.	1,817 17 0
Monro & Co.	1,797 5 7
G. H. Tucker	1,697 14 8
T. Turner	1,697 6 9
Crosby & Co.	1,638 10 9
E. & E. Iles	1,543 0 0
S. Edwards & Co.	1,408 15 2
Municipal Contracting and Engineering Co., Leyton*	1,299 0 0

[Surveyor's estimate, £1,628 13s.]

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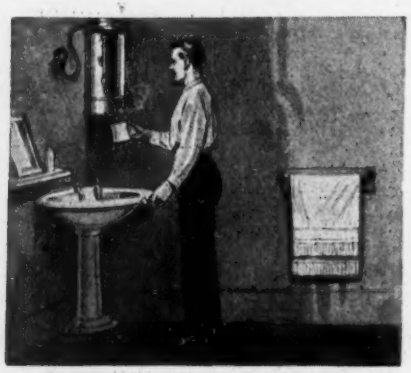

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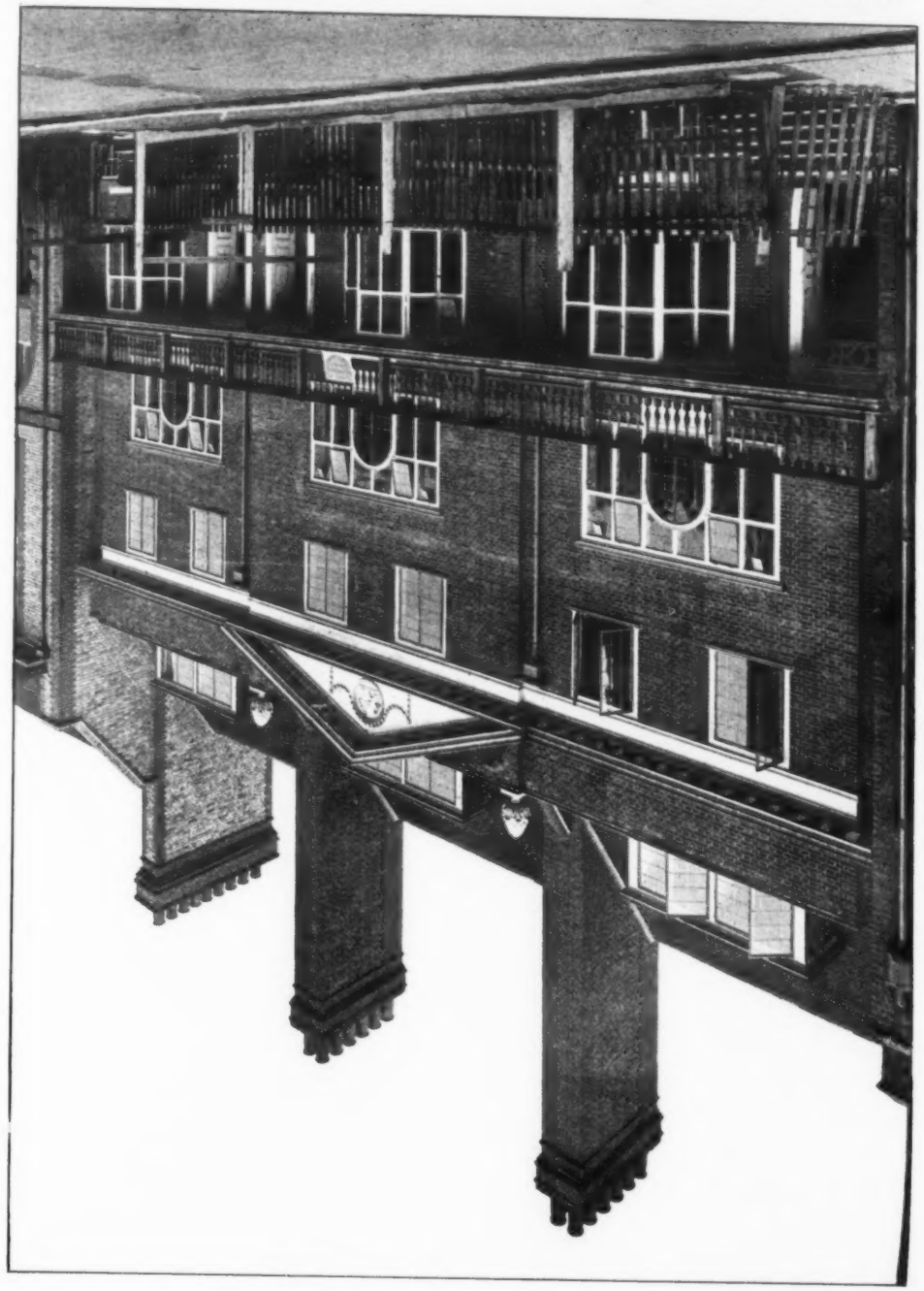

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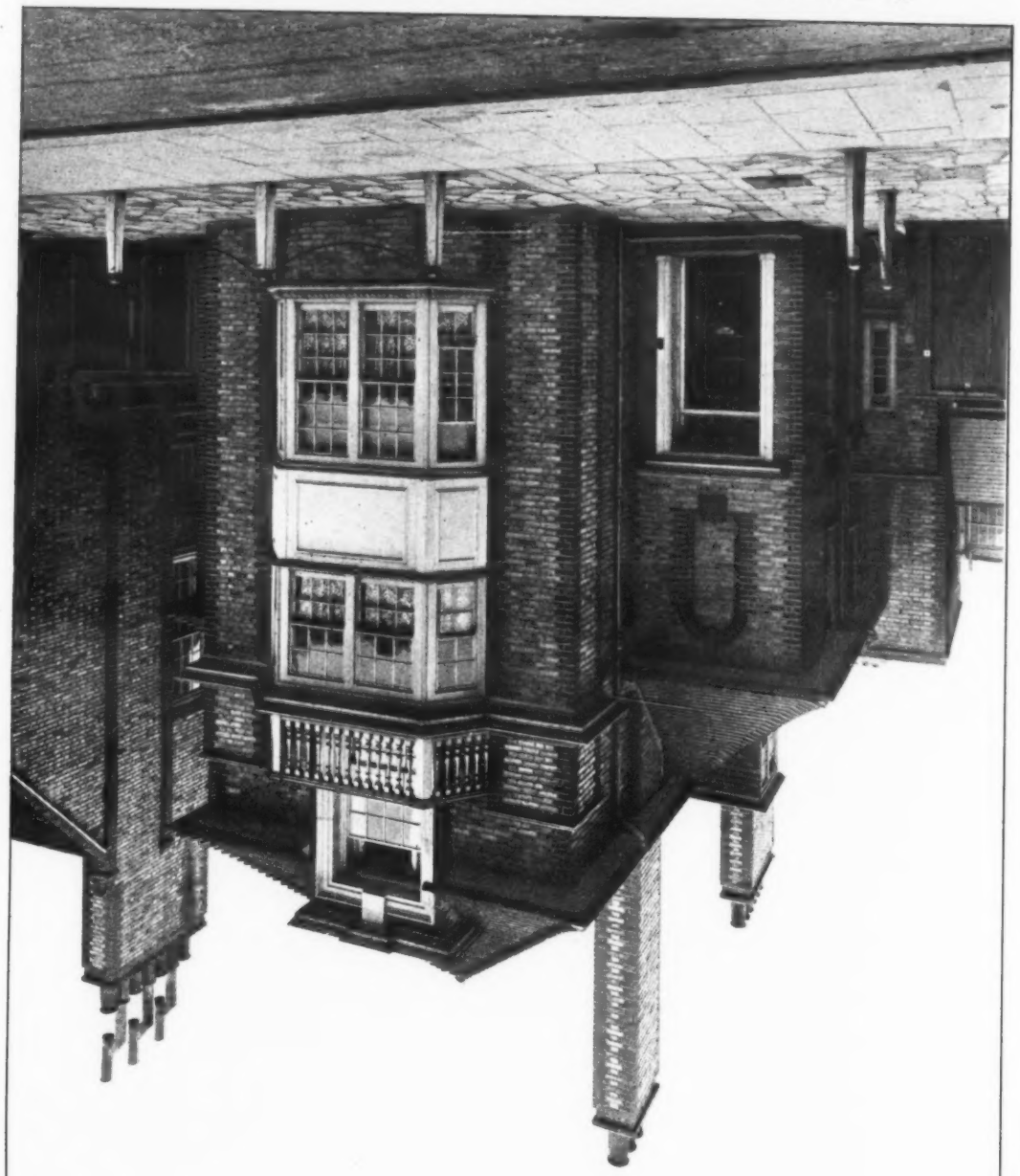

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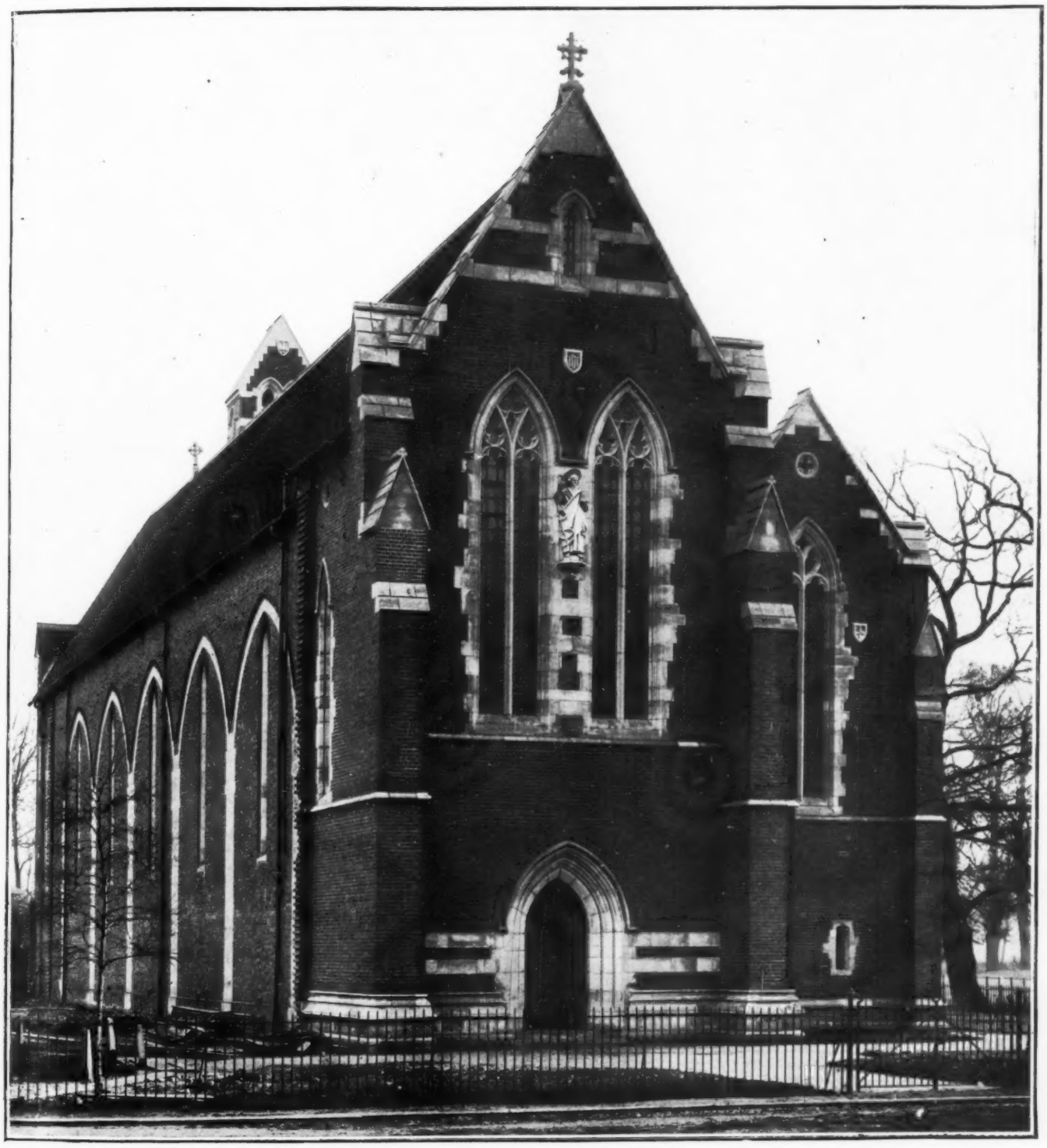

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